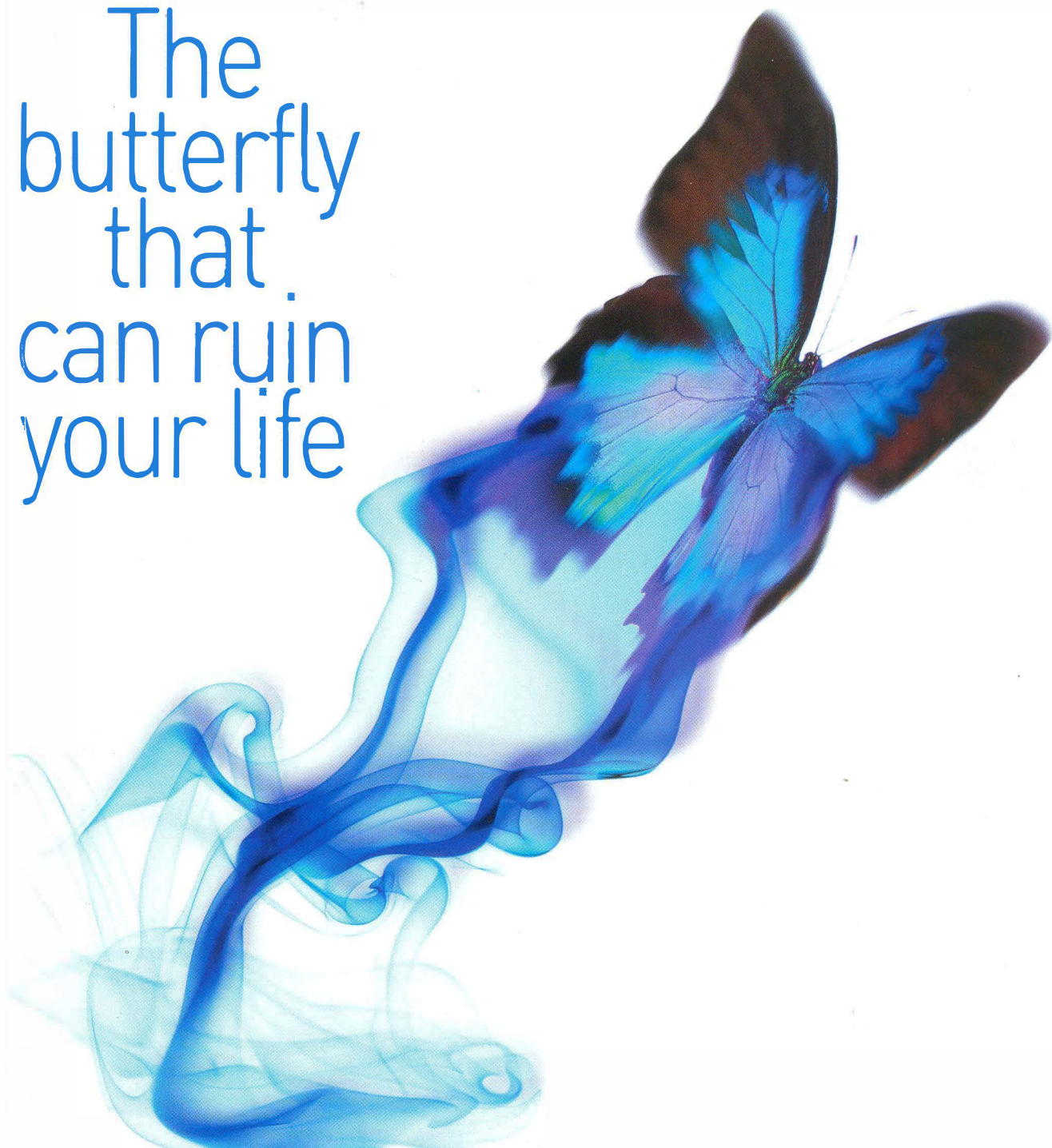


THE WEEK

MARCH 25, 2012

health

The
butterfly
that
can ruin
your life





INSIDE

SANJAY AHLAWAT

INTERVIEW.....PG 15

Dr C. Shekhar Pant on breast cancer in India, awareness and screening

BODYSCAPE.....PG 26

A nagging headache? What it implies and why you should get it checked

GROOMING.....PG 30

Serve with a smile: grooming lessons for medical professionals

INITIATIVE.....PG 32

David Grier runs from Kashmir to Kanyakumari so that children can smile

BEHAVIOURAL DISORDERS..PG 38

Awareness on attention deficit hyperactivity disorder is low in India

INCONTINENCE.....PG 42

Loss of bladder control is perplexing. It can be managed and corrected



SUPER MOM: Shruti Gupta (sitting, with her children) has been effectively managing hypothyroidism for 23 years

Letters PG 4

Quickscan PG 6

Q&A: Nutrition PG 28

Stethoscope PG 44

Q&A: Sexology PG 48

Yoga made easy PG 50

Cover design Ajay Pingle
 Photos Shutterstock
 Picture editor Cherian Thomas
 Picture research Bimal Nath C.
 Layout Jayant Pithadia,
 Rajesh A.S., T.S. Unnikrishnan,
 Sumesh C.N., Sujesh K.

The Week Supplement: Published By Jacob Mathew from Kochi for the Malayala Manorama Co. Ltd., and printed by him at the Malayala Manorama Press, Kottayam. Managing Editor: Philip Mathew

PG 16

COVER STORY

LOW TIDE

Depression, weight gain, hair loss... these could be an indication of an underactive thyroid gland. About 42 million people in India suffer from thyroid diseases, hypothyroidism being the most common. The condition can, however, be reversed and its consequences, which include heart problems, prevented with early detection and the right treatment

Plus

The butterfly-shaped gland in your neck

Symptoms of hypothyroidism, exercises, myths

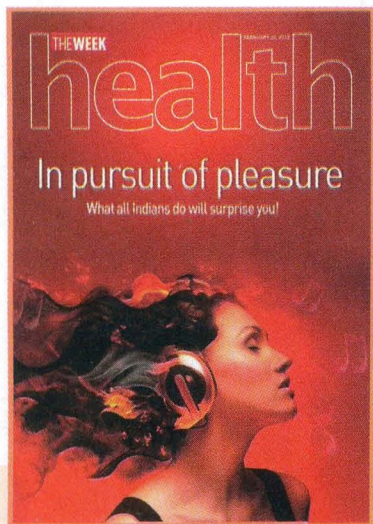
Guest columns

When the hormone harmony is disrupted:

Dr A.G. Unnikrishnan

Hypothyroidism is rarely related to lifestyle: Dr Sujeet Jha

LETTERS



THE ETERNAL QUEST

While a labourer derives pleasure from getting a square meal and a roof above his head, the rich are never satisfied with what they have ('High life', February 26). Some children are not satisfied with the luxury provided by their parents and indulge in illegal activities to get more money for things that give them more pleasure. There is no limit to the pursuit of pleasure. Things that gave pleasure decades ago do not seem exciting anymore. People seek more comforts and enjoyment. But what brings true joy is contentment and satisfaction.

C. SURYANARAYANA MURTHY,
Visakhapatnam,
Andhra Pradesh.

Give and take care

Diminishing joint family system and looming synchronised families have imposed deep cuts on relationships, community activities, sharing and sparing quality time, and increased mental and physical health problems ('Who cares about the carer?', February 26).

Those were the days when the cry of a family member would see the entire neighbourhood trooping in to help. Now when you cry, you cry alone.

Materialistic pursuits have redefined relationships, and the number of caregivers is diminishing fast.

Kindness breeds kindness. Small gestures of help are sure to energise the caregivers who otherwise are a vanishing breed like the sparrow.

RAMAKRISHNA. G. NAIK
Dharwad, Karnatak

Message not delivered

I found a discrepancy in 'Patch work' (February 26). The statement that nicotine patches and other nicotine replacement products may not deliver what they promise—to help smokers quit smoking and prevent relapse—is incorrect.

The excerpts and the data from the publication rightly point towards equal relapse rate in nicotine replacement therapy us-

ers and non-users. So it would be unfair to say that it doesn't help smokers kick the butt. Further, the write-up also says that nicotine patches may help in the event of withdrawal symptoms (that is, help quit smoking).

Hence, the message that NRT might not help quit smoking is incorrect, while it is important to say that, preventing relapse importantly involves one's own will and consultations and nicotine patches are no wonder-pills.

MEHUL LAMBHARIA
On email





Handle with extra care

The article 'Silent killer' (February 26) is a revelation about the toxicity of the liquid metal and how carelessly we handle it. That the doctors are not fully aware of the magnitude of the danger is appalling.

Damaged CFL bulbs are strewn all over the backyards and waysides. While many European countries have either banned or restricted the indiscriminate use of mercury, India has no laws to contain the indiscriminate use of mercury. In India, where many think that laws are meant to be broken, what is the use of issuing mere guidelines? It is high time the issue is addressed with alacrity.

AYYASSERI RAVEENDRANATH,
Aranmula, Kerala.

People do understand the use of mercury is inevitable but do not realise that it is a silent killer. The article provides information about the killer liquid metal. But I wonder why the government wouldn't move on to other alternatives. Many countries have banned the use of mercury in medical equipment, which is truly commendable. I wish mercury be banned worldwide.

Quicksan is a helpful tool for

readers. I really liked the one that talks about the hazards of head-phone use. I see so many people on two-wheelers or four-wheelers happily conversing or listening to music using headphones. They seem to be unaware of the surroundings. They don't realise the danger of this practice. I feel technology, which makes our life easy, has its flipside, too. More than concentrating on making a fashion statement, the youngsters should be concerned about their safety.

ARATHI RAGHUVeer,
Mysore, Karnataka

Bed manners

My concerns about the majority of our population, especially the women, missing the pleasures of sex were reflected in the article 'Class act' (January 29). Sex is an art and every individual can be a true artiste if guided and educated properly.

There is ignorance about sex and guidance is lacking. What we need are sex guidance centres, classes, expert talks and adult education facilities.

Sex is serious business, that needs to be approached sincerely, selflessly and responsibly.

R.V. KOLHATKAR,
Hyderabad.



Have you been touched by an article in **HEALTH**? Do you have a story or experience to share? What more would you like to see on the pages? Please write to us. The best letter of each issue wins **THE WEEK** leather backpack. You can mail us at editor@the-week.com or post your letter to The Week, Manorama Buildings, P.B. No. 4278, Kochi - 682036, Kerala, India.

Please enclose your full postal address and telephone number.

THE WEEK
leather
backpack



WIN

HELP FROM THE EAST

The ancient Chinese martial art Tai Chi, with its slow and gentle movements combined with deep breathing and relaxation techniques, can improve balance and stability and reduce the risk of falls in people with Parkinson's disease, says a study published in the New England Journal of Medicine.

For the study 195 people with mild to moderate Parkinson's disease were assigned to twice-weekly 60-minute sessions of one of three exercise groups: Tai Chi, stretching and resistance training.

At six months, the Tai Chi group did better than the stretching group in tests of balance, control and walking skills. They outperformed the resistance training group in balance, control and stride length. The frequency of falls for the Tai Chi group was less than the stretching group and similar to the resistance group.



WORK BLUES

Working long hours can increase your risk of depression, concludes a study in the journal PLoS ONE. The study followed 2,123 middle-aged British civil servants for nearly six years. Those who worked 11 or more hours a day had a 2.5 times greater risk of having a major depressive episode compared to those working 7-8 hours a day. That association held even after accounting for chronic physical disease, smoking, alcohol use, job strain and work-related social support.

DID YOU KNOW?

A study presented at the Academy of Neurology's meeting suggests that slower walking speeds in middle age were linked to a higher risk of dementia, and stronger hand grip with a lower risk of stroke.

SINUSITIS AND ANTIBIOTICS

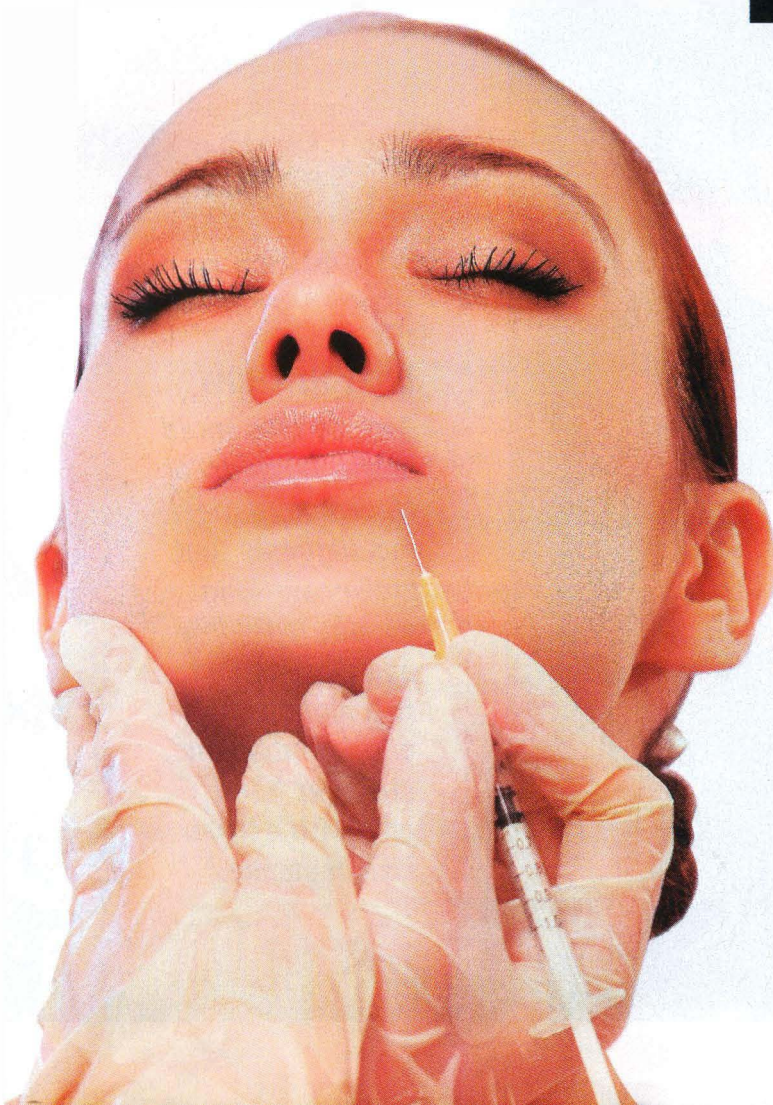
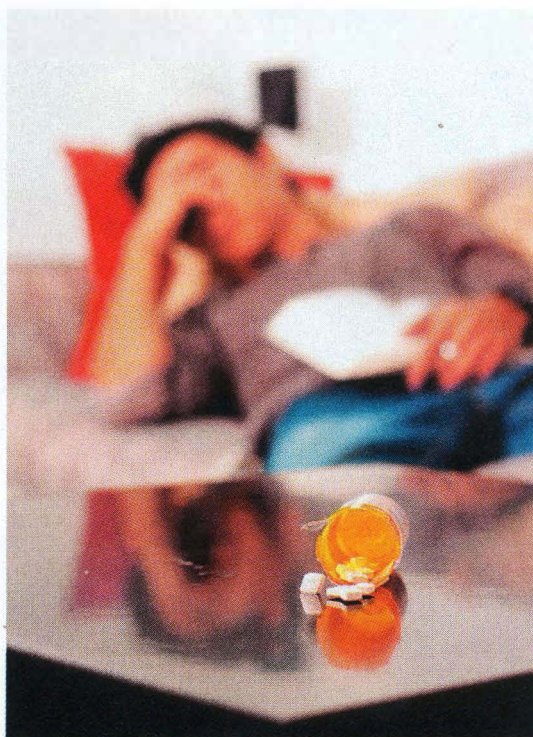
Though routinely prescribed, antibiotics offer little help in fighting sinusitis, according to a study published in the *JAMA*.

In the study involving 166 adults with sinusitis, those randomly assigned to take the antibiotic amoxicillin fared no better than those taking placebo pills. After 10 days, the symptoms improved for 78 per cent of the participants on antibiotics and 80 per cent of those on placebo. Patients who took antibiotics did not get better faster or have fewer symptoms.

Sinus infection, which causes inflammation of the sinuses and nasal cavity, can be caused by viruses or bacteria.

While antibiotics are effective in treating bacterial infections, they do not treat viruses. It is often difficult to diagnose what causes the infection and 80 per cent of patients get better on their own.

Since over-prescription is contributing to antibiotic resistance, antibiotics should be used only "for patients with moderately severe or severe symptoms".



AGE CUT

Going under the scalpel for facial cosmetic procedures can shave off six to eight years from your actual age.

To provide "quantifiable evidence" that plastic surgery does make people look younger, Canadian researchers asked 40 first-year medical students to estimate the ages of 60 patients (54 women and six men, ages 45 to 72) from before and after pictures that were mixed up.

The more procedures a person had, the younger they were perceived to be. Patients who had facelift and necklift looked an average of 5.7 years younger after surgery. Patients who added surgery on their upper and lower eyelids to facelifts looked 7.5 years younger. People who added forehead lifts to the other three procedures looked 8.4 years younger in their after picture.

One limitation of the study published in the *Archives of Facial Plastic Surgery* is that all the procedures were performed by the same surgeon.



THE LOWS OF HIGHS

Walking in high heels may turn heads, but may also damage leg muscles, change a woman's gait, and heighten the risk of injuries, says an Australian study in the *Journal of Applied Physiology*.

The researchers compared the walking mechanics of nine young women who wore high heels for 40 hours or more a week for at least two years with 10 young women who rarely wore heels.

The women walked barefoot 10 times along a 26-foot, flat walkway wearing electrodes on their feet and legs to measure muscle activity. The walkway was also equipped with a plate to gauge ground reaction forces, and cameras recorded their gait. The high heelers walked another 10 times in their heels.

The high heelers walked differently from those who didn't wear heels, even when they walked barefoot. They moved with shorter, more forceful strides. Since their feet were always in a flexed, toes-pointed position for long, the fibres in their calf muscles had shortened and were under great strain.

SLEEPING PILL PERILS

Sleeping pills may help you get a good night's sleep, but it can also increase the risk of early death and cancer, says a study published in the journal *BMJ Open*.

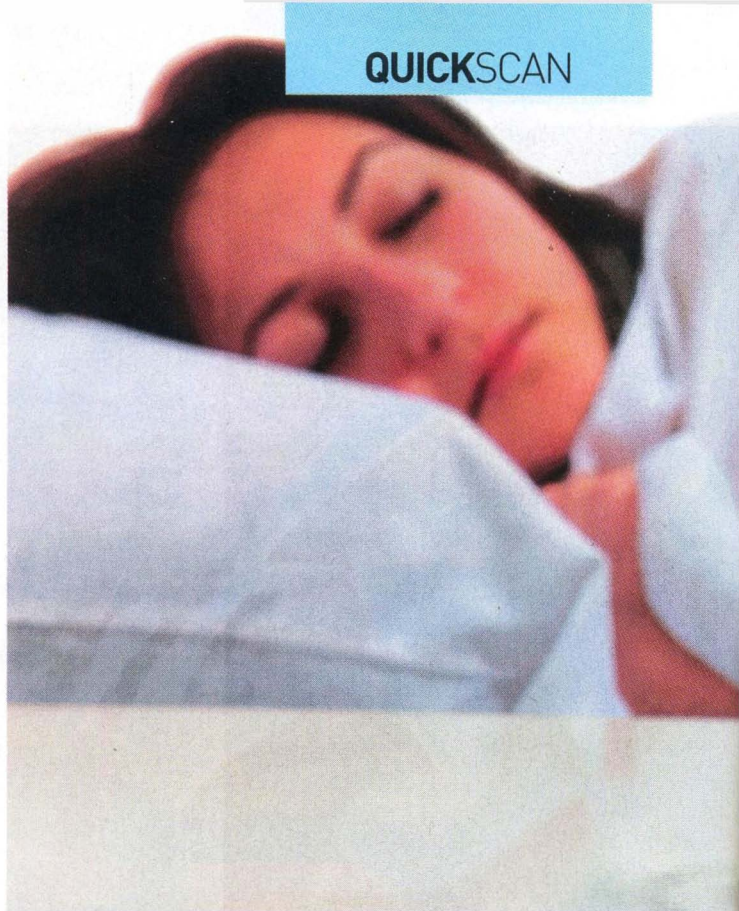
For the study, researchers compared the medical records of 10,529 people who were taking prescription sleep aids with 23,676 non-users with similar health histories.

The study focused on hypnotic sleeping pills that include zolpidem, temazepam, eszopiclone, zaleplon, triazolam, flurazepam, barbiturates, and sedative antihistamines.

During a two and a half-year follow-up, the death rate among those who used sleeping pills was 6.1 per cent compared to 1.2 per cent among non-users.

There was a dose-response effect. The risk of death was 3.6 times for those who took fewer than 18 annual doses; 4.43 times for those taking between 18 and 132 doses a year, and 5.32 times for those on more than 132 doses a year.

People on higher doses also found a 35 per cent increased risk of cancer.



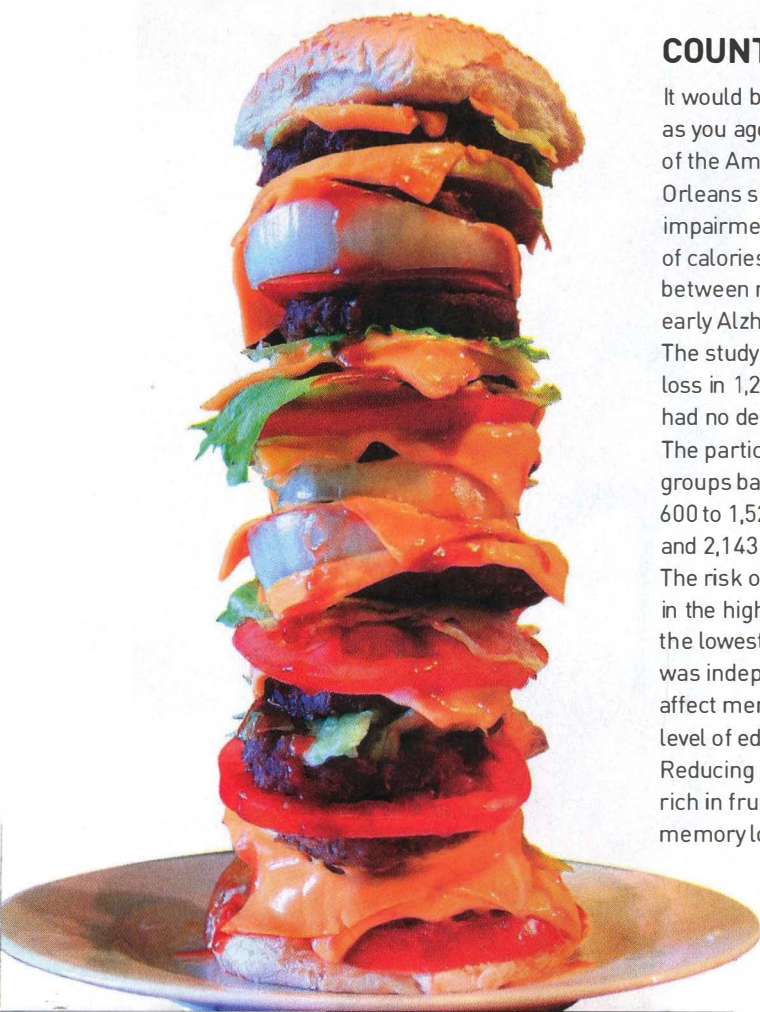
COUNT THE CALORIES

It would be advisable to reduce your calorie intake as you age. A US study presented at a meeting of the American Academy of Neurology in New Orleans suggests that the risk of mild cognitive impairment (MCI) increases with the amount of calories consumed each day. MCI is a stage between normal forgetfulness due to ageing and early Alzheimer's disease.

The study analysed the impact of diet on memory loss in 1,233 people aged 70 to 89. The participants had no dementia, but 163 had symptoms of MCI. The participants were divided into three equal groups based on their daily calorie consumption: 600 to 1,526 calories a day, 1,526 to 2,143 calories and 2,143 to 6,000 calories a day.

The risk of having MCI more than doubled for those in the highest calorie group compared to those in the lowest calorie group. The risk posed by diet was independent of other risk factors that can affect memory loss such as stroke, diabetes and level of education.

Reducing calories and consuming a healthy diet rich in fruits and vegetables may help ward off memory loss as we age, the study concludes.



**DID YOU KNOW?**

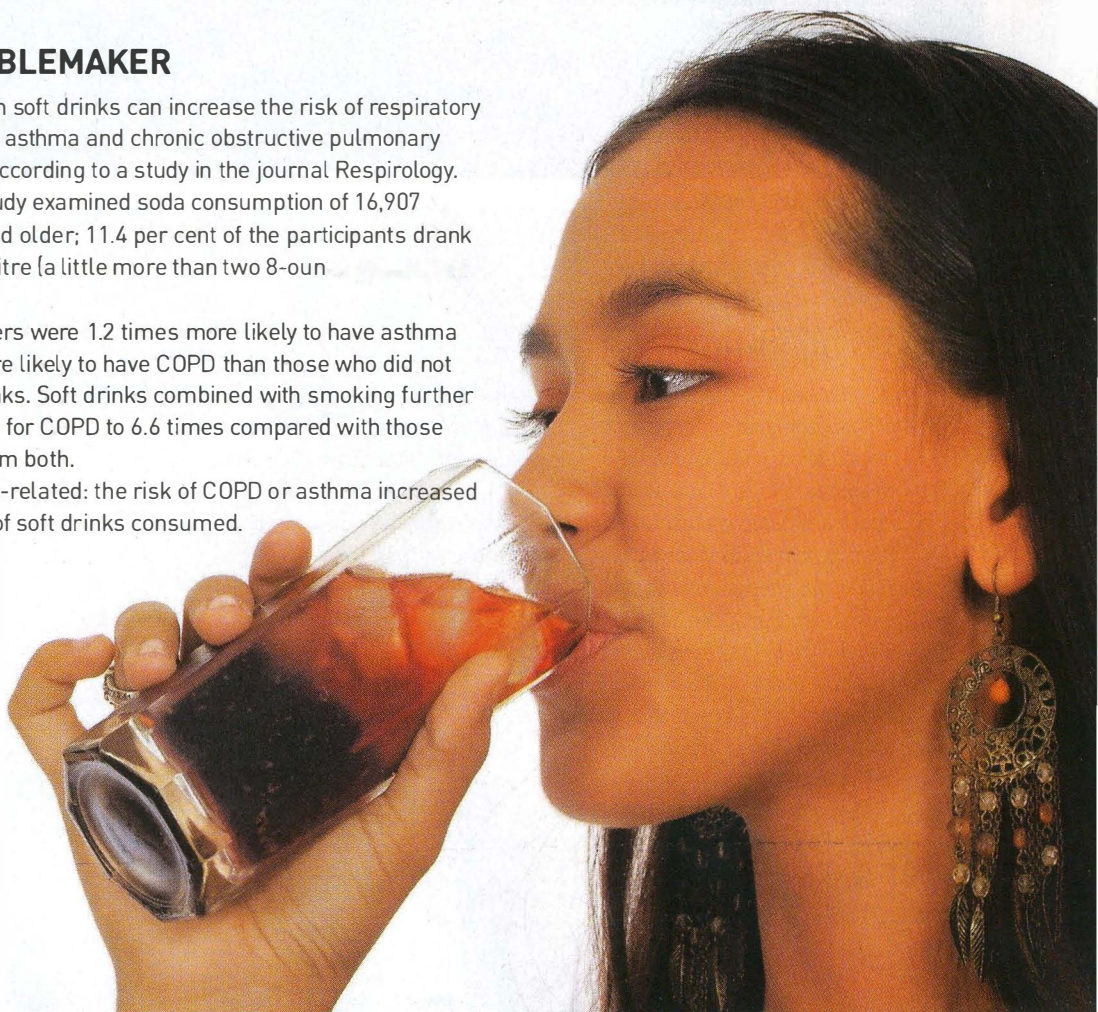
Spanking and other forms of physical punishment can make kids more aggressive and antisocial; can cause mental health problems such as anxiety, depression, and drug and alcohol abuse; and can lead to cognitive impairment, developmental difficulties and lower IQ.

SODA TROUBLEMAKER

Drinking too much soft drinks can increase the risk of respiratory problems such as asthma and chronic obstructive pulmonary disease (COPD), according to a study in the journal *Respirology*. The Australian study examined soda consumption of 16,907 people aged 16 and older; 11.4 per cent of the participants drank more than half a litre (a little more than two 8-oun soft drinks a day.

Heavy soda drinkers were 1.2 times more likely to have asthma and 1.7 times more likely to have COPD than those who did not consume soft drinks. Soft drinks combined with smoking further increased the risk for COPD to 6.6 times compared with those who abstained from both.

The risk was dose-related: the risk of COPD or asthma increased with the quantity of soft drinks consumed.



JUST CAN'T DO WITHOUT

Texting and tweeting may be more addictive than cigarettes and alcohol, according to a study published in the journal *Psychological Science*. For the study, 205 Germans were polled via BlackBerrys seven times a day for a week. They had to report whether they were feeling an urge for something, the intensity of the desire and whether they could resist or whether they succumbed to the desire.

While sleep and sex topped the desire scale, these were easier to resist because of the lack of opportunities at any given time. But the hardest-to-resist desires were checking social media and working.

People often succumb to social media because they are easily accessible and do not have monetary downsides even though they can take up users' time. Similarly, avoiding the desire to work when socialising or during leisure activities "may be difficult because work can define people's identities, dictate many aspects of daily life, and invoke penalties if important duties are shirked".

The study also found that a person's willpower waned as the day wore on.



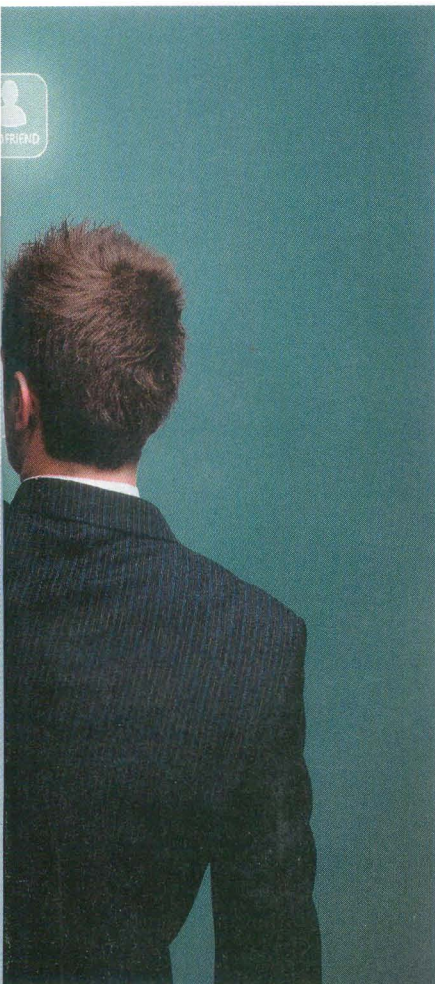
DRUG DIARRHOEA

The US Food and Drug Administration has issued a public warning that the use of stomach acid drugs known as proton pump inhibitors (PPIs) may increase the risk of *Clostridium difficile*-associated diarrhoea (CDAD) by 1.4 to 2.75 times.

Clostridium difficile is a bacterium that can cause chronic diarrhoea and other serious intestinal conditions. Colon surgeries, and rare deaths, were reported in some patients.

PPIs are prescribed to treat heartburn, acid reflux and stomach ulcers and work by reducing the amount of acid in the stomach. PPIs include dexlansoprazole, esomeprazole, esomeprazole combined with naproxen, lansoprazole, omeprazole, omeprazole combined with sodium bicarbonate, pantoprazole, and rabeprazole.

The FDA is advising clinicians to consider a diagnosis of CDAD for patients taking PPIs who have persistent diarrhoea. Patients are advised to take the lowest dose of a PPI when necessary and for the shortest duration possible.

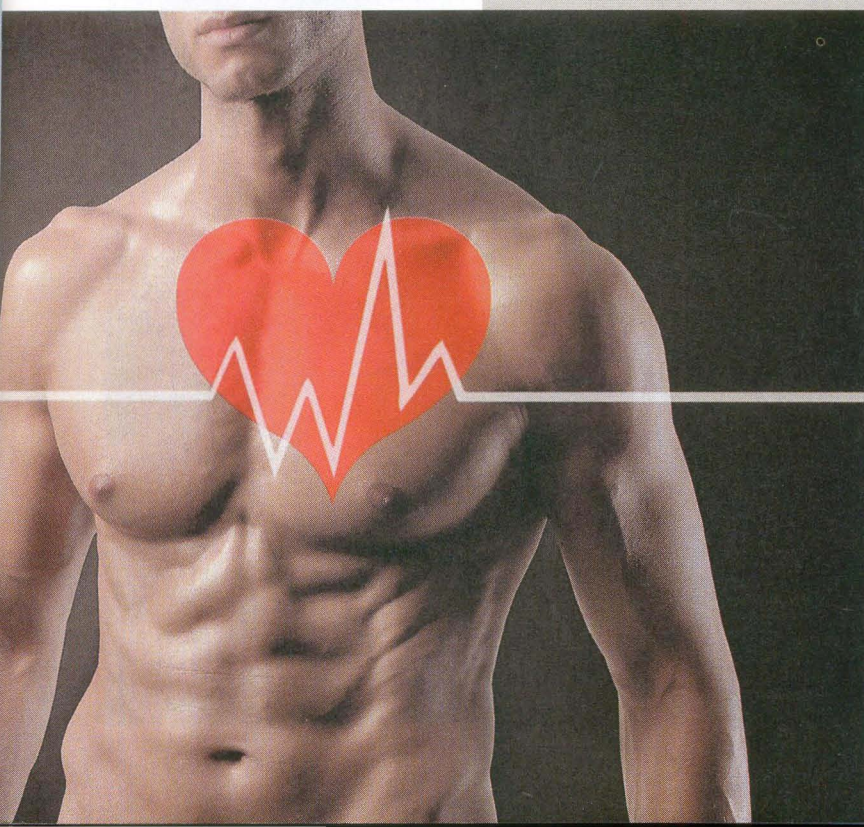


FIT FOR THE HEART

When it comes to heart health, maintaining or improving your fitness level is as important as not packing on fat, says a study published in the *Journal of the American College of Cardiology*. For the study, the researchers followed 3,148 healthy adults for six years and looked for any of three risk factors: high blood pressure, high cholesterol or metabolic syndrome.

Those who maintained or improved their fitness levels had a 26 per cent and 28 per cent lower risk of hypertension, a 42 per cent and 52 per cent lower risk of metabolic syndrome, and a 26 per cent and 30 per cent lower risk of high cholesterol, respectively.

Those who gained weight had a 26 per cent, 71 per cent and 48 per cent elevated risk of developing hypertension, metabolic syndrome, and high cholesterol. Both fitness and fatness are independently important and either one appeared to counter some of the negative effects of the other.



DID YOU KNOW?

In a study of 13,988 Japanese seniors, drinking three to four cups of green tea a day was associated with a 25 per cent lower risk of functional disability and frailty and greater independence and agility: American Journal of Clinical Nutrition

THE Y FACTOR

Why do men have a greater risk of heart disease than women? The Y chromosome could be the culprit, says a study in the journal *The Lancet*.

An analysis of the DNA of 3,233 men in the UK has revealed that 90 per cent of men have one of two variants of a cluster of genes in their Y chromosomes—haplogroup I and haplogroup R1b1b2. Men belonging to haplogroup I have a 50 per cent increased risk of coronary artery disease than other men. The risk is independent of all other risk factors such as smoking, high blood pressure, diabetes and high cholesterol. The increased risk can be attributed to the effect of the haplogroup I Y chromosome on the immune system and inflammation. Genes linked to the development of hardening of the arteries are also more active in men who belonged to haplogroup I.

COLD IS SOOTHENING

A review of 17 studies has found that taking a cold bath after exercise can indeed soothe sore muscles, but the safety of the practice is unclear.

Called cryotherapy, the practice of soaking in water at temperatures less than 15°C is gaining popularity among amateur and professional athletes to reduce swelling, stiffness and soreness of the muscles after an intense workout.

The study, published in the journal *The Cochrane Library*, found that cold baths reduced muscle soreness by 20 per cent one to four days after exercise but only when compared to resting or doing nothing. Other interventions such as warm-water immersion, light jogging or using compression stockings may yield similar results without the side effects.

Cold-water immersion can induce a degree of shock on the body which in turn can affect the heart, blood vessels, and respiratory system.

SMOKY MEMORY

Middle-aged male smokers may face a faster decline in their brain function and cognitive abilities compared to non-smokers, concludes a study in the journal *Archives of General Psychiatry*.

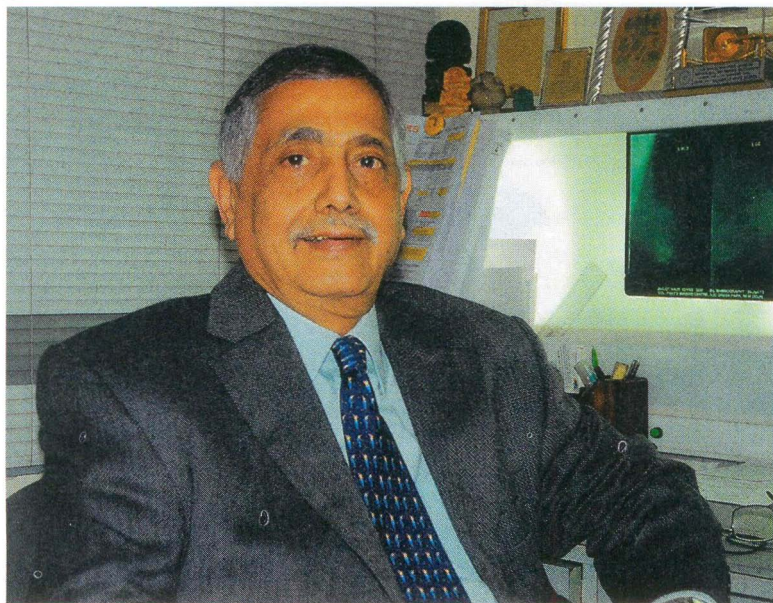
The link between smoking and cognitive decline was assessed in 5,099 men and 2,137 women who had their first cognitive assessment at an average age of 56, followed by two more assessments over 10 years. Cognitive decline in smokers was as fast as in non-smokers who were 10 years older than them. But a similar link was not seen in female smokers probably because they tend to smoke fewer cigarettes a day than men and for fewer years. Male smokers may also consume more alcohol, thereby increasing their risk.

The risk was also not seen in smokers who quit more than a decade ago.

Contributor:

SHYLA JOVITHA ABRAHAM





INTERVIEW/Dr C. Shekhar Pant

Blame the lifestyle

BY HUMRA QURAISHI

By 2020, the number of cases of breast cancer in India will be on par with those in the west, says a World Health Organisation survey. It also says that while in the west 65 per cent of the cases are diagnosed at stages 1 or 2, in India as many cases are diagnosed at stages 3 or 4. The reasons include lack of awareness and social taboo. This is elucidated by Dr C. Shekhar Pant in his *The Atlas of Breast Imaging*. The second edition—10 years after the first—focuses on case studies and is complete with digitally-imaged illustrations and MRIs. Pant, who has been working in the field of breast radiology since 1986, is chairperson of the NGO Forum for Breast Cancer Protection. He is also a member of the International Atomic Energy Agency core group for developing strategies for member states on early breast cancer detection. Excerpts from an interview.

Why have you focused on the imaging aspect of breast cancer?

Breast imaging is an integral part of the curriculum for radiologists. The crux of early detection is the high quality of mammograms provided by technicians and identifying the subtle changes in the mammogram by radiologists.

If this aspect is so crucial in the treatment of breast cancer, how come we are lagging?

There has not been much emphasis on utilisation of mammography for early detection of breast cancer. In the private sector, in financial terms, mammography is not lucrative over MRI, CT and ultrasound and in the government sector the priorities are different. The result is that we have not been able to train young radiologists in the field of mammography. In the US, if one desires to practise mammography, one has to undergo a year's fellowship before being given the licence.

Where do we stand on breast cancer in men, its diagnosis and treatment.

Male breast cancer accounts for 1 per cent of all breast cancers, and most cases are found in men

between the ages of 60 and 70. A man's risk of developing breast cancer is one in 1,000. Signs and symptoms include a firm mass below the nipple, retraction and ulceration of the nipple and skin changes around the nipple, including puckering, redness or scaling.

Cancer treatment has become unaffordable.

With the rising average age of the population, in the coming years, cancer will be a major killer and the government should gear up to tackle the challenge. This would mean making provisions for early detection and treatment, which is unaffordable for many.

A lot of women go through trauma due to wrong diagnosis.

Mammography is a screening procedure for detection of early breast cancer in a healthy woman having no obvious symptoms. To achieve this goal we need high quality of mammograms and of interpretation skill. Unfortunately, we are lagging in both aspects.

Why do you think there are more cases of breast cancer in urban areas?

An important reason for the increase in breast cancer among urban population is the changing lifestyle. Earlier, women had their babies young, breast fed them for a longer period and had sufficient exercise. Today, career women in the metros prefer to stay single, have no children or delay the birth of their first child to their late thirties. Having babies after 30 is considered risky for the mother, both in terms of her ability to have an easy delivery as well as increased chances of breast cancer, especially if there is a history of breast cancer in the family. Junk food, smoking, alcohol and minimal physical activity have also contributed to the rise in breast cancer in the urban setting. In rural areas, excessive use of pesticides in food is primarily the reason. ●

COVERSTORY

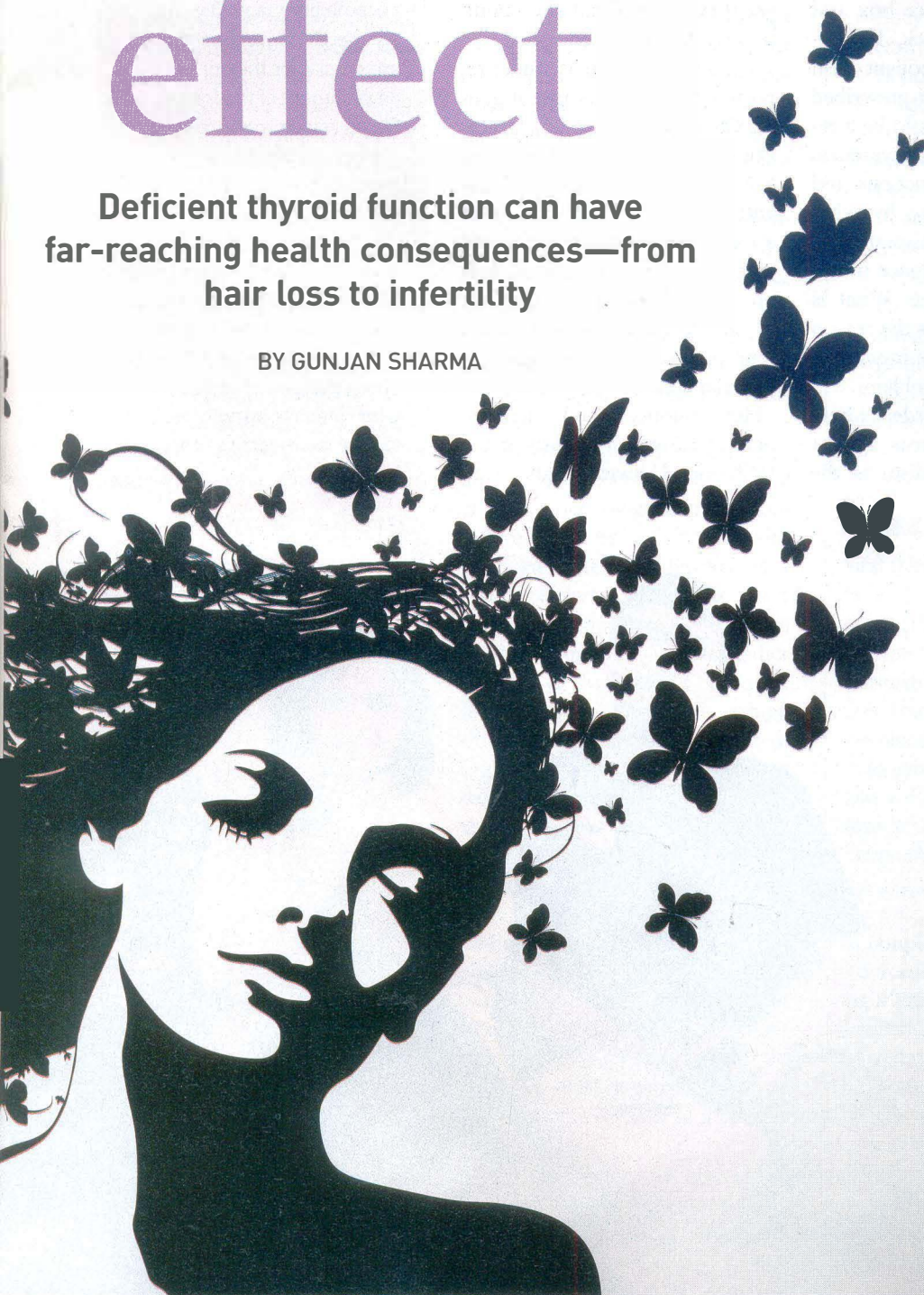
Th



e butterfly effect

Deficient thyroid function can have
far-reaching health consequences—from
hair loss to infertility

BY GUNJAN SHARMA



I am gaining weight. Do I have hypothyroidism?" This is an association urban women today are increasingly drawing between their tilting scales and that butterfly-shaped endocrine gland located around the voice box and the wind pipe in the neck. This association and the subsequent dash for the path lab for a self-prescribed thyroid function test could be a reflection of the growing awareness about the gland, its functions and their importance. Going by what many doctors say, it is also an indication of the high incidence of hypothyroidism in women. What is not clear yet, however, is the reason for this higher incidence in women and what triggers the problem.

An auto-immune disorder (where the immune system turns against the body), hypothyroidism is the

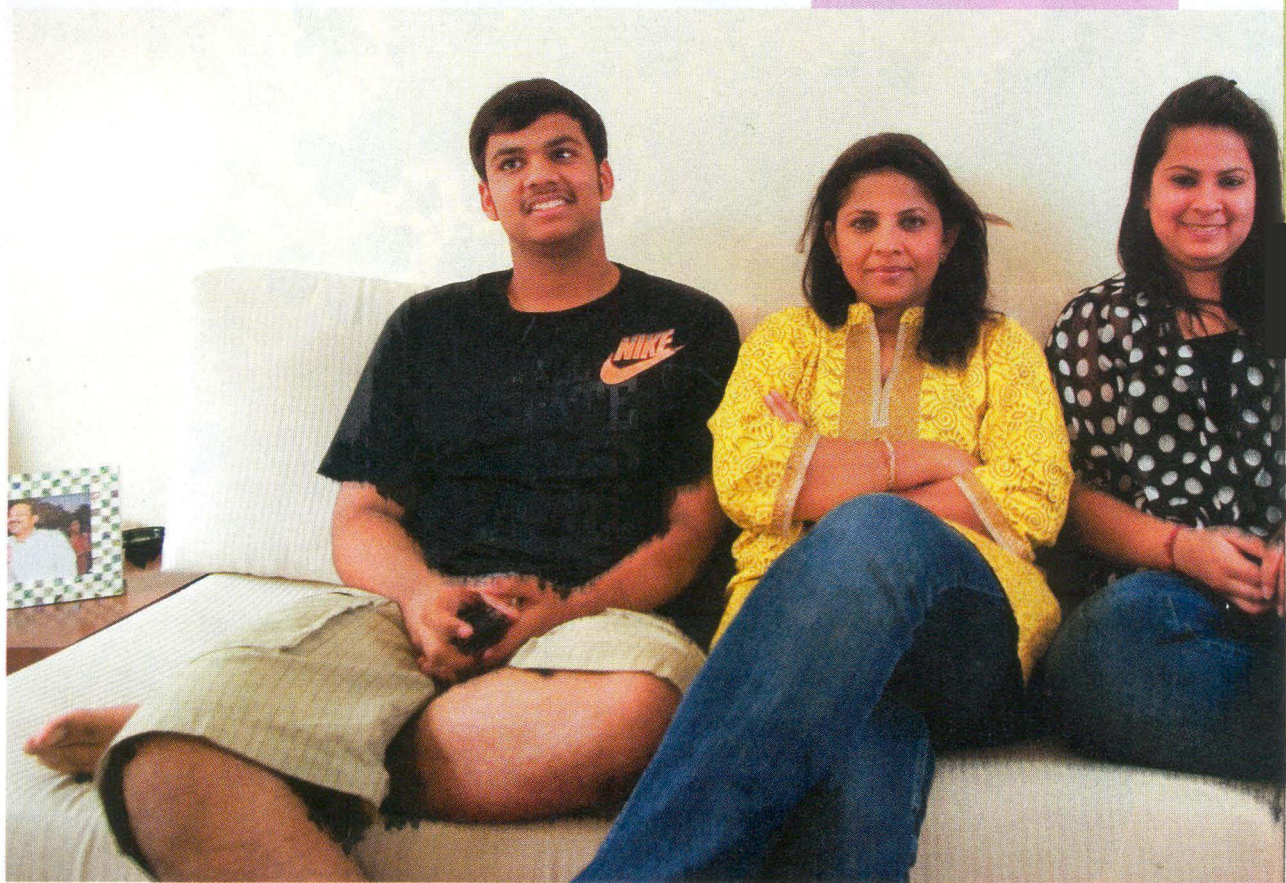
underproduction of the thyroid hormones—essentially triiodothyronine (T3), thyroxine (T4)—by an underactive thyroid. Many doctors say they see, on an average, five new patients with hypothyroidism every day. And yet they believe that the condition is under-reported.

If hypothyroidism is under-reported, then it is because it goes unnoticed thanks to its largely vague symptoms—tiredness, hair loss, hoarse voice, forgetfulness and puffy face and eyes—that are easily mistaken for stress and weakness. If left untreated, failure of the thyroid gland can lead to serious complications: from reproductive problems to cardiovascular conditions.

Her unnoticed and therefore untreated hypothyroidism made Delhi-based Shweta Singh, 35, go

Never a deterrent

Delhi homemaker Shruti Gupta's deficient thyroid function was diagnosed when she became pregnant 23 years ago. As the thyroid hormones are crucial for the normal development of the foetus, Shruti was immediately put on medicines. She has been on medicines ever since to ensure normal thyroid function. "My hypothyroid never came in my way to fitness," says Shruti, 45. "I have led a very active life. All I was asked to do by my doctor was to go for a thyroid check every year and as and when I feel its symptoms, and to take my medicines regularly."



through two painful miscarriages. A subsequent detailed examination ascertained the underlying cause to be hypothyroidism.

Thyroid failure can also cause depression. Doctors say that about 14 per cent of all cases of depression are because of hypothyroidism. Psychiatrists refer many cases to endocrinologists when patients don't respond to standard psychiatric treatment for depression.

Shiv Prakash Jha, 54, consulted a psychiatrist as his persistent insomnia and depression were getting on his nerves. When psychotherapy failed to improve his condition, he underwent a detailed hormone profile, which showed that the levels of thyroid stimulating hormone (TSH) was above 100. Incidentally, the production of T3 and T4 is regulated by TSH, which is produced by the pituitary gland.

IN CONTROL: Shruti (centre) with her children. Her hypothyroidism was diagnosed when she became pregnant 23 years ago



SANJAY AHLAWAT

TSH levels are in the normal range (0.5-5) when thyroid is producing adequate T4. Inadequate levels of thyroid hormones prompt the system to stimulate the thyroid, raising TSH levels in the blood. Less common causes of hypothyroidism are the failure of the pituitary to secrete TSH and the failure of the hypothalamus to secrete the thyrotropin regulating hormone that regulates pituitary's TSH production. Drug induced cases are also there.

"People with hypothyroidism can show severe depression, detachment, feeling of worthlessness, mood swings and may even develop suicidal thoughts," says Dr Ambrish Mithal, senior consultant endocrinologist at Medanta Medcity, Gurgaon.

In women, hypothyroidism can also cause infertility. The upside is that once diagnosed, thyroid failure can be corrected with medicines. Hence, infertility as a result of thyroid failure is often reversible. Low thyroid hormone levels can impair ovulation either directly or by causing prolactin levels to go up. Prolactin is high during pregnancy and breastfeeding. High levels of this hormone stops ovulation and thus disrupts the menstrual cycle.

Manmeet Kaur, 31, had planned to have a baby a year after marriage in 2006. But when she couldn't conceive for four years, she consulted a gynaecologist. She was referred to an endocrinologist after her TSH levels were found to be high. As soon as her thyroid function was restored, she conceived and gave birth to a healthy male baby.

Hypothyroidism can also manifest in women as irregular menstrual cycle, Polycystic Ovarian Syndrome and obesity. While those affected generally gain up

SYMPTOMS OF HYPOTHYROIDISM **WATCH OUT!**

- ◆ Progressive weight gain
- ◆ Fatigue, general weakness
- ◆ Puffy face and eyes
- ◆ Body aches and muscle cramps
- ◆ Dry coarse hair, dry skin
- ◆ Forgetfulness
- ◆ Hair loss and loss of lateral eyebrows
- ◆ Loss of interest
- ◆ Hoarseness of voice
- ◆ Slow heart beat
- ◆ Intolerance to cold
- ◆ Lack of appetite, constipation
- ◆ Brittle nails
- ◆ Menstrual irregularities
- ◆ Infertility

TIME FOR MEDICINE **WHEN TO POP THE PILLS**

First thing in the morning. It takes 20 minutes for the body to absorb the medicine. Though you can take black tea, it is better to avoid while on medication. Thyroid medicine stays in the blood for seven days. If you miss your medicine one day, take a double dose the next day. Also, you can take it four-five hours after any meal.

to a couple of kilos extra with hypothyroidism, in some women the weight gain can be as high as 15-20 kilos. In such cases, medicine might have to be supplemented with exercise and diet.

Weight gain was the symptom that sent Vani Khurana of Chennai rushing for the doctor's clinic. Khurana's work schedule as an executive didn't leave her much time to exercise or eat at home. A gradual weight gain—which could

easily be linked to her lifestyle—of about 13 kilos over a year forced her to go on a diet which helped lose only a few kilos. The diagnosis of hypothyroidism, in a way, changed everything for the better. “Medication helped lose weight faster. And, eating healthy has become a way of life for me,” says Khurana.

As women with severe hypothyroidism rarely conceive, the manifestation of this condition

during pregnancy is not very common. But if it does occur, insufficient thyroid hormone production in the mother can cause serious defects in the baby and can even prove fatal. The thyroid hormone thyroxine plays an important role in the cognitive development of the foetus, and in turn, the intelligence quotient of the child. Women with hypothyroidism who are planning to start a family are therefore advised to watch their thyroid func-

tion. “During the first trimester, the foetus is totally dependent on the mother’s hormone. Thyroid helps the normal development of brain, and deficiency of it, especially during first trimester, can lead to mental retardation of the child,” says Dr Hrishikesh Pai, senior consultant gynaecologist and obstetrician at Lilavati Hospital, Mumbai, and Fortis La Femme Hospital, Delhi.

According to a US study, women

Growth index

What is thyroid: An endocrine gland, fairly large and ductless

Location: On the front part of the neck below the thyroid cartilage (Adam’s apple)

Function: Secretes hormones that influence growth and development by regulating the rate of metabolism.

Hormone pathway: Thyroid hormone synthesis starts from a part of the brain called the hypothalamus that releases thyrotropin-releasing hormone (TRH), which travels from the pituitary stalk to the pituitary gland.

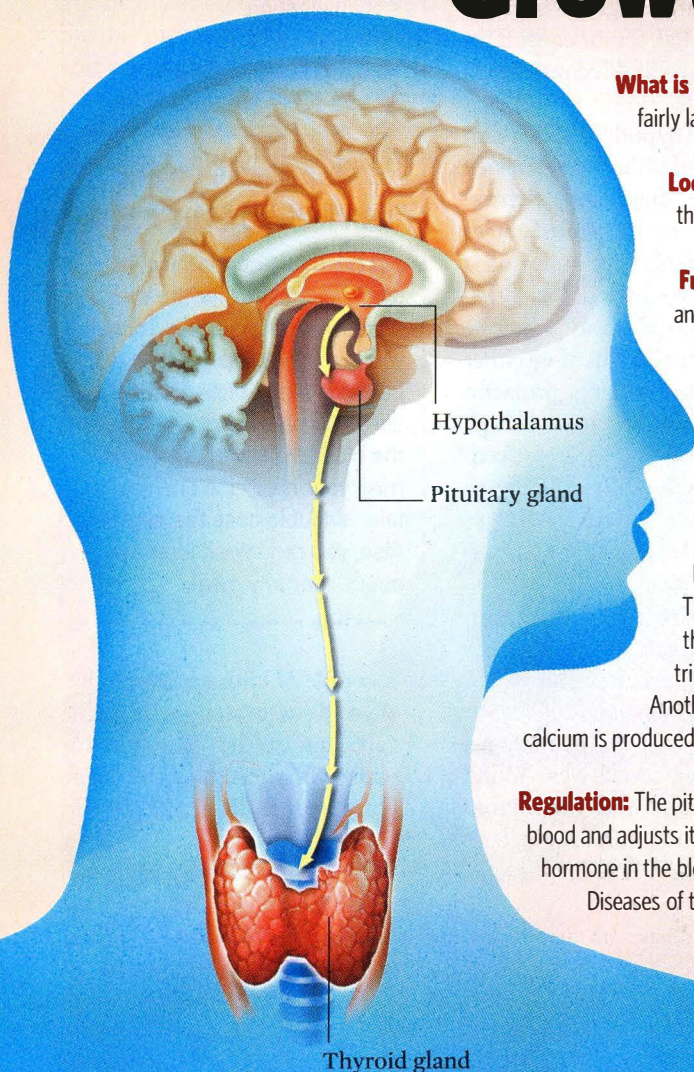
The pituitary gland then releases thyroid-stimulating hormone (TSH) into the blood.

The TSH stimulates the thyroid to produce the two thyroid hormones, L-thyroxine (T4) and triiodothyronine (T3).

Another hormone Calcitonin involved in the regulation of calcium is produced by specific cells in the gland.

Regulation: The pituitary gland senses how much hormone is in the blood and adjusts its production accordingly. If there is too much thyroid hormone in the blood, TRH and TSH production are both reduced.

Diseases of this gland can also alter the levels of the hormones.



with thyroid dysfunction are at a higher risk of having infants with defects in their heart, kidney or brain. Birth defects like cleft lip and cleft palate may also have an association with the mother's hypothyroidism, says the study. "Though there is no concrete study to prove this association, there is none to refute their claim, too," says Dr Anoop Misra, head of the department of metabolic disorders at Fortis Hospital, Delhi.

Hypothyroidism is also associated with high cholesterol and lipid levels. In fact, there are instances of people visiting cardiologists with suspected heart problems ending up with a diagnosis of hypothyroidism. Shalini Devi's hypothyroidism was diagnosed 15 years ago by Dr H.S. Rissam, interventional cardiologist at Max Hospital in Delhi. Shalini had been referred to Rissam for an intervention. On seeing Shalini,

Rissam observed that her skin was thick and dry and she was plump, symptoms usually associated with high TSH level. Before proceeding for the intervention, Rissam got her thyroid profile test, which confirmed Rissam's suspicion. Shalini's TSH level was 100, very high compared with the normal range of 0.5-5. Rissam cancelled the intervention and put her on thyroid medication. Shalini is now hale and hearty at 65, her cholesterol

GRAPHICS: N.V. JOSE; RESEARCH: SRUTHI RAJAN

Disorders

HYPERTHYROIDISM

(overactive thyroid activity)

Causes: Toxic nodule, excessive intake of iodine, ingesting thyroid hormone, Graves' disease

Symptoms: Insomnia, nervousness, hand tremors, excessive sweating, feeling excessively hot in normal or cold temperatures, frequent bowel movements, losing weight despite normal or increased appetite, scanty or nil menstruation, joint pains, difficulty concentrating

HYPOTHYROIDISM

(underactive thyroid activity)

Causes: Postpartum thyroiditis (inflammation), acute thyroiditis, silent thyroiditis, thyroid hormone resistance, medications that affect thyroid function

Symptoms: Early symptoms include easy fatigue, exhaustion, inability to sustain cold temperatures. Later symptoms are poor appetite, weight gain, dry skin, hoarse voice, puffiness around eyes

THYROID NODULES

Are generally benign thyroid neoplasms (new abnormal tissue growth), but may be malignant, too

GOITRE: The enlargement of the thyroid gland that can occur with hyperthyroidism or hypothyroidism and also with benign and malignant cancerous nodules

Causes: Mostly iodine deficiency

Diagnosis

Evaluation is done by physical examination and review of medical history.

The focus would be eyes, skin, heart and neurologic findings.

Blood tests to check the TSH, T4, T3 levels

Nuclear thyroid scan, where a small amount of radioactive iodine is swallowed

Thyroid ultrasound helps to determine the size, number and types of nodules in the gland

Fine-needle aspiration for a thyroid tissue sample, usually from a nodule.

CT scan

Diet

Both high and low TSH refers to a thyroid dysfunction. As it is not related to diet, there are no specific diet recommendations for people with thyroid dysfunction.

The remarkable endocrine diseases

BY DR A.G. UNNIKRISHNAN

The striking features of Maria's face gave away the diagnosis, despite the dimming lights and twinkling monitors of the emergency room. I noticed her dry, sallow complexion and the puffed-out face, with narrow slits in place of her eyes. The emergency physician gave me the blood results. "Sir, she has myxoedema [swelling of the skin and tissue beneath due to hypothyroidism] coma. Thyroid hormone levels are undetectable in blood. The patient has reportedly stopped taking thyroxine pills on her own some time ago. And now, she is quite sick."

Myxoedema coma is very rare, and occurs due to untreated hypothyroidism (or thyroid gland failure). It happens when the thyroid hormone levels are very, very low—usually when patients forgo their thyroid medications for a very long period. Myxoedema coma is treatable, but some patients do succumb to its devastating complications despite the best care.

Thyroid diseases are very common. Among them, the most common is hypothyroidism. Studies in India suggest that 1 in every 10 adults has hypothyroidism. Hypothyroidism is more common in women.

Thyroid diseases belong to a group called endocrine illnesses. The human body is a complex system of many

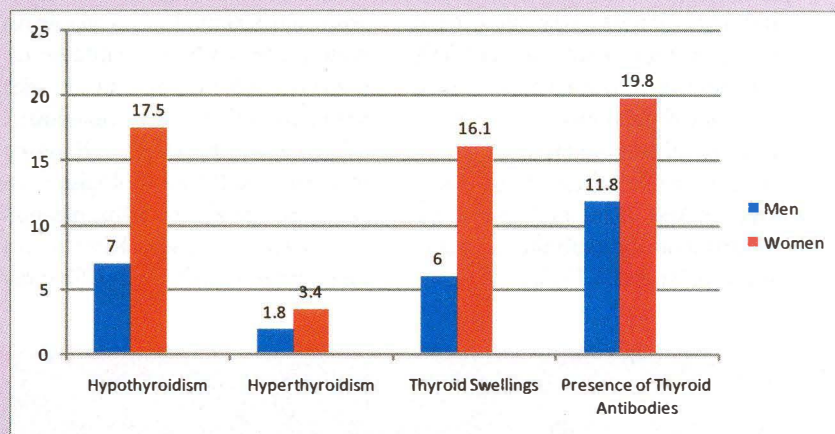
organs linked together by blood vessels. Chemical messengers called hormones pass through the blood and control these organs. Glands producing hormones are endocrine glands. The endocrine system is essential for the coordinated functioning of the organs of the human body, and the end result of this orchestra is 'life'. Endocrinology is the study of the normal as well as abnormal functioning of these glands.

There are two remarkable aspects of endocrine diseases. Firstly, they are often very common. Endocrine diseases include thyroid disease, diabetes, obesity and osteoporosis (an age-related thinning of bones). Except for diabetes, all endocrine diseases are more common in women, and the reason for this is not well understood.

The second remarkable aspect is that these diseases can be easily diagnosed by a blood test that assesses hormone levels

in the blood. This means that treatment is logical and simple. For instance, when hormone levels are low, hormones can be supplemented. If the hormone levels are high, they can be brought down with medication. Also, endocrine gland tumours are often treatable with medicines and surgery.

The thyroid is a classic example of an endocrine gland. It is hard to imagine that this little butterfly-shaped gland in the neck produces hormones controlling the body's energy levels. Among thyroid diseases, hypothyroidism is very common (see figure), especially in women. A mild form of hypothyroidism, called subclinical hypothyroidism, is particularly common. In the affected women, hypothyroidism can cause weight gain, delayed puberty, growth failure, excess menstrual bleeding, poor pregnancy outcomes and infertility. In contrast, hyperthyroidism (excess thyroid hormone levels) can cause anxiety, irregular



SOURCE: MENON U.V. ET AL. JIMA 2009 AND UNNIKRISHNAN A.G. AND MENON U.V., IJEM 2011.

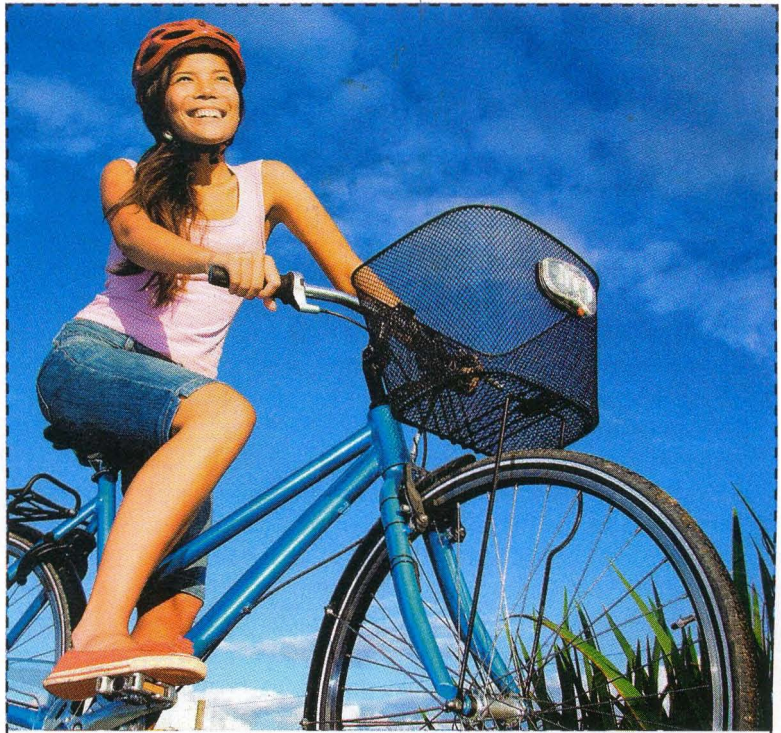
menses and problems during pregnancy. High thyroid hormone levels can lead to excess heart rate and an increased risk of fractures.

Why is hypothyroidism more common in women? Well, the reason could be because autoimmune thyroid damage is the most common cause of hypothyroidism. It is well known that women are more susceptible to all autoimmune diseases (diseases where the human body attacks its own organs). This is also suggested by the fact that anti-thyroid antibodies are more common in women than men (see graph). Thyroid swelling, called goitre, is also more common in women. While most goitres are benign, it is important to diagnose malignant thyroid swellings early on, because thyroid cancers are among the most curable types of cancers.

The graph on the facing page shows that thyroid diseases are more common in women (the percentage of adult men and women with thyroid disease in a south India study).

Maria was successfully managed with thyroid hormone supplementation and good medical care. She continues to take thyroid hormone tablets regularly and monitors her hormone levels every three-six months. She sees her doctor who adjusts the dosage of medications to maintain hormone levels in the normal range.

The writer is professor of endocrinology at the Amrita Institute of Medical Sciences, Kochi, and executive editor of the *Journal of Thyroid Research and Practice*.



EXERCISE AND THYROID

Stimulating workout

Hypothyroidism occurs when the thyroid gland cannot produce adequate amount of thyroid hormone, thyroxine. Regular exercise can help stimulate the gland to produce more thyroxine. A daily 15-20 minutes of exercise that can raise your heart rate is good for those with thyroid failure. It also increases their rate of metabolism, which is otherwise low owing to hypothyroidism. Besides, exercise

is mood-lifting and keeps body weight under control. Any form of exercise—cardio, aerobic, dance, swimming, cycling—helps. Certain yoga postures like the camel, cobra and paschimottaasana are especially helpful in stimulating the thyroid gland. “It complements medication,” says yoga consultant Ruchi Jha. “In most people, the dose of medication (hormone) comes down.”

and lipid levels absolutely under control. “She is still not a heart patient,” says Rissam.

But severe hypothyroidism, if left untreated, can lead to many cardiovascular problems, says Rissam. “These patients can be easily identified by a doctor as they look unnaturally plump with thick facial skin,” he says. “In fact, every patient should be tested for his thyroid profile before any surgi-

cal treatment. General anaesthesia can cause extreme hypo-tension in these patients and the patient in some cases can slip into coma.”

Some symptoms such as fluid collection around the heart and lungs can be misleading. “This generally happens in tuberculosis. I get patients who were previously treated for tuberculosis. They visit us only when the TB medication doesn’t work,” says Dr Sujeet Jha,

Rarely related to lifestyle

BY DR SUJEET JHA

The primary function of the thyroid gland is the regulation of metabolism through the release of hormones triiodothyronine and thyroxine, which together, contribute to the maintenance of a clear mind, regular bowels and healthy skin and hair. Such an important gland, however, doesn't come without its fair share of problems. In India, about 42 million people suffer from thyroid disease, the most common being hypothyroidism. Although anyone may develop hypothyroidism, some are at an increased risk. Hypothyroidism can run in the family and is more common in women and those aged above 50. Various medications can cause it and people who have been treated for an overactive thyroid are also at increased risk, as treatment can leave the thyroid unable to produce enough hormones. Hypothyroidism is also common after pregnancy, and in people with iodine deficiency. The most common cause is autoimmune and occurs when the body's immune system mistakenly attacks its own cells. Therefore, people with other autoimmune conditions, such as diabetes or rheumatoid arthritis, also have a higher chance of developing the condition. So, with most hypothyroidism being due to gender, age or genes there's really nothing much one can do to prevent it.

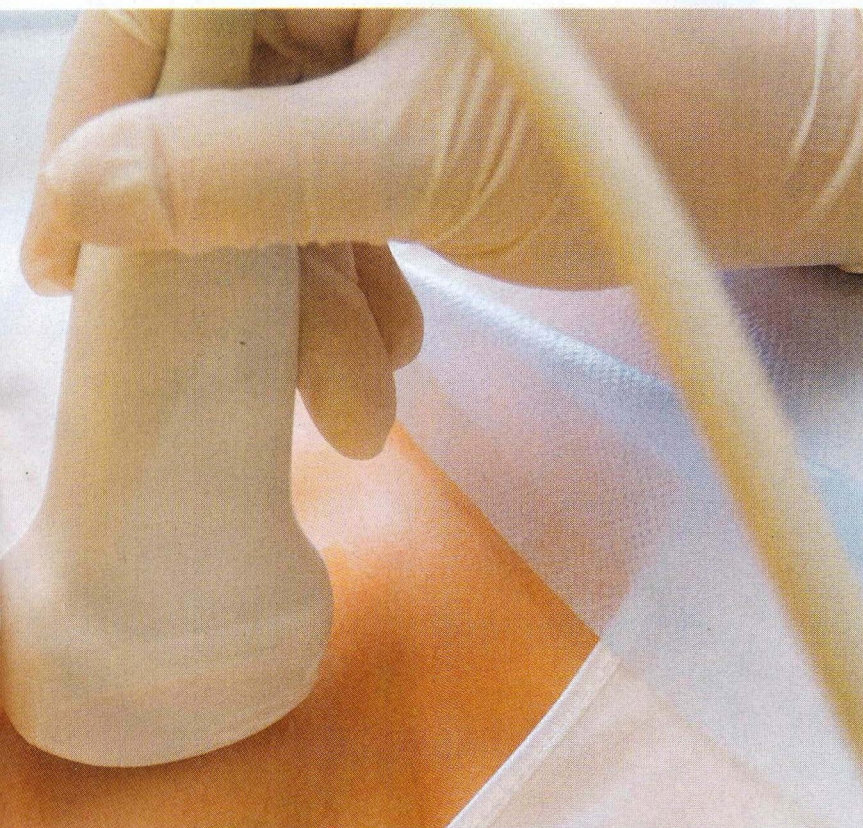
All hope is not lost, however, as hypothyroidism is one of the simplest diseases to treat and if detected early it can be controlled effectively before it becomes symptomatic. A simple blood test can detect an underactive thyroid and those at increased risk of developing hypothyroidism should get regular checks even if they have no symptoms. Contrary to the popular notion that hypothyroidism causes massive weight gain and crippling fatigue, it seldom causes symptoms in the early stages. Symptoms to be aware of include hair loss, increased sensitivity to the cold, tiredness, dry skin, constipation and mild weight gain, and those who are symptomatic should have their thyroid checked. Depressed mood and high cholesterol levels, although seemingly unrelated, have also been found to be associated with hypothyroidism. In pregnant women, untreated hypothyroidism can cause a number of complications for both mother and baby, and testing before, during and after pregnancy is important.

Unlike other conditions such as type 2 diabetes, hypothyroidism is rarely related to lifestyle. Although a lack of dietary iodine may be a cause of hypothyroidism in some parts of the world, such a cause is less likely in India where measures to prevent iodine deficiency through the iodisation of salt have been implemented. Deficiencies of certain vitamins such as B and D, although sometimes seen in

people with hypothyroidism, have not been shown to have a direct causative link with the disease. In spite of this, the internet is rife with claims that diets rich in certain foods hold the key to the prevention of hypothyroidism. Although prevention of hypothyroidism is not possible in most cases, what can be prevented are the long-term health problems associated with the condition. If diagnosed early and treated appropriately the consequences of chronic untreated hypothyroidism such as infertility and heart problems can be avoided. All it requires is that people stay alert to possible symptoms, recognise their risk and go for regular checks if symptomatic or in the increased risk category.

The writer is consultant endocrinologist and head of the department of endocrinology, diabetes and obesity, Max Healthcare, Delhi.





consultant endocrinologist and director of Institute of Endocrinology, Diabetes and Obesity at Max Healthcare, Delhi.

Doctors have found a link between metabolic disorders and hypothyroidism. As in the case of Gauri Gupta, 23, a bank employee in Delhi. The homeopath she consulted for hair loss prescribed a TSH test, which showed high levels of the hormone. When the levels did not come down even with medication—thyroxine hormone—further probe detected celiac disease, where the body fails to absorb gluten protein and becomes allergic to wheat and related substances. “Gauri was asked to make changes in her eating habits to manage celiac disease and given medication for her hypothyroidism. Both the problems were controlled in a month,” says Jha.

Though doctors have discerned links between hypothyroidism and many conditions such as celiac dis-

TIMELY PROBE: Screening of thyroid function is important to avoid complications

ease and diabetes, what triggers hypothyroidism is still not very clear. Some studies point to the impact of lifestyle changes, stress and environmental pollutants. “Though women are more prone to hypothyroidism than men, what triggers it still is a mystery,” says Jha.

Though hypothyroidism can ruin one’s life, the consolation is that it is easily controllable by administering thyroxine hormone, and the medication doesn’t have any side-effects. “It is still not considered a ‘disease’, unlike its hyper counterpart, which may pose much more severe health risks,” says Dr S.K. Wangnoo, senior consultant at the Apollo Centre for Obesity, Diabetes and Endocrinology at Indraprastha Apollo Hospitals, Delhi.

To avoid the complications, screening of thyroid function is important. Those with a fam-

MYTHS AND FACTS

Powered by knowledge

Hypothyroidism increases body weight.

Though hypothyroidism can increase body weight by a couple of kilos in some cases, weight gain is not an essential symptom.

You can’t lose weight once diagnosed with hypothyroidism.

You can very well lose weight once your thyroid levels are under control. In fact, doctors believe that you can reduce weight even if your TSH level is elevated by some points, with the help of routine exercise and balance diet.

Overdose will help lose weight.

Not at all. Thyroxine does not have any side-effects when taken in a regulated way. An overdose can cause hyperthyroidism, which is a disease that can lead to conditions such as increased heart rate and restlessness.

It is a life-long disease.

Hypothyroidism is not a disease. It is a deficiency. And hence it is reversible. In most conditions, the symptoms disappear when TSH levels become normal. But deficiency generally is for life.

ily history or persistent symptoms (see box) should get a thyroid profile done. Indian studies show that 68.2 per cent women with thyroid failure show menstrual irregularities. And hypothyroidism affects 1 in every 2,500 newborns. Says Wangnoo, “More awareness can help people report their hypothyroidism on time.” An informed step in time can save a life from going haywire. ●

BODYSCAPE

Oh, my head

Headaches are among the most common disorders of the nervous system. It can affect any part of the head. A headache can manifest as a dull or sharp pain or a throbbing sensation. It may radiate from one point or can remain localised. The onset can be sudden or gradual. Headaches can last several days or can be gone in less than an hour.

TEXT BY AJISH P. JOY & GRAPHICS BY N.V. JOSE

The two main classifications of headaches are: primary and secondary.

Primary headaches

Generally not the result of any underlying condition. It is often caused by problems related to the pain-sensitive features in the brain. Some of the commonly occurring primary headaches are:

Tension headache: Most common type. Dull, tight pressure-like pain in the vertex, radiating from the occipital region. Poorly sensitive to ordinary analgesics.

Migraine: Second most common type. Classical triad of paroxysmal headache, vomiting and focal neurological events. Has an almost certain genetic basis. Far more debilitating than tension headaches.

Cluster headache: Relatively uncommon (affecting fewer than 1 in 1,000 adults). Frequently recurring, short-lasting but extremely severe.

Trigeminal neuralgia: Chronic pain affecting the trigeminal (5th cranial) nerve.

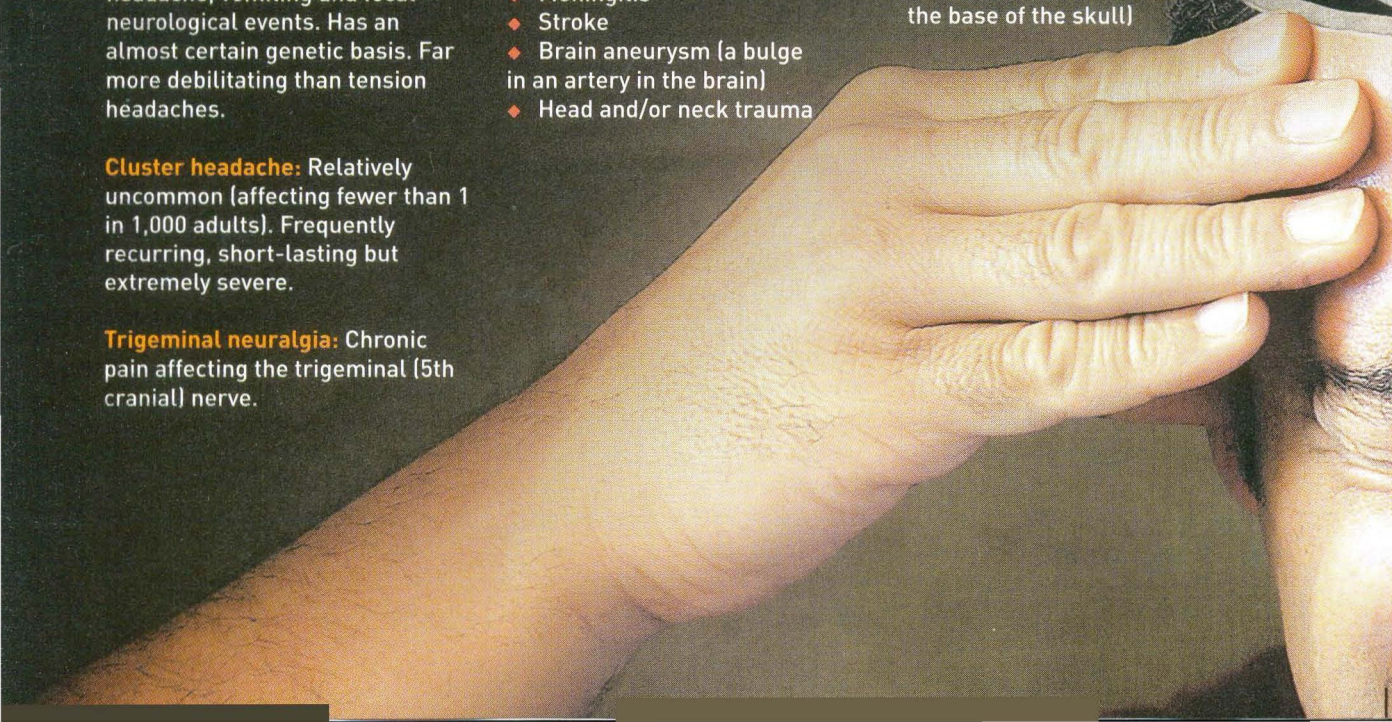
Chronic daily headaches, exercise headaches, hypnic headaches, coital headaches and cough headaches are also classified as primary headaches though they can also denote an underlying condition.

Secondary headaches

A headache is termed secondary if it is caused by an underlying condition. Since some of these underlying causes can be fatal, early diagnosis and prompt treatment are essential in such cases. Some of the main conditions causing secondary headaches are:

- ◆ Brain tumour
- ◆ Encephalitis
- ◆ Meningitis
- ◆ Stroke
- ◆ Brain aneurysm (a bulge in an artery in the brain)
- ◆ Head and/or neck trauma

- ◆ Ophthalmic problems
- ◆ Cranial or cervical vascular disorder, like subarachnoid haemorrhage
- ◆ Non-vascular intracranial disorders, like idiopathic intracranial hypertension
- ◆ Pseudotumour cerebri (increased pressure inside the skull)
- ◆ Intracranial infection
- ◆ Homeostasis disorders
- ◆ Blood clot (venous thrombosis) in the brain
- ◆ Glaucoma
- ◆ Sinusitis
- ◆ Alcohol, medications or chemicals
- ◆ Hangovers
- ◆ Chiari malformation (structural problem at the base of the skull)



- ◆ Giant cell arteritis (inflammation of the lining of the arteries)
- ◆ Hypertension
- ◆ Dehydration
- ◆ Hypothyroidism
- ◆ Psychiatric disorders

Lifestyle factors that may trigger primary headaches

- ◆ Stress
- ◆ Alcohol and drug use
- ◆ Poor posture
- ◆ Food items containing nitrates
- ◆ Skipping meals
- ◆ Lack of sleep or change in sleep patterns

Seek emergency help

Headaches can be dangerous when accompanied by any of the following problems

- ◆ Numbness, weakness or paralysis on one side of the body
- ◆ Unexplained nausea or vomiting
- ◆ Fever above 102 - 104 degrees Fahrenheit
- ◆ Trouble in comprehension
- ◆ Trouble seeing, speaking or walking
- ◆ Fainting
- ◆ Stiff neck

Hormonal changes affect headaches in women before menstruation, or mid-cycle.

Nearly 157 million work hours are missed each year due to migraines.

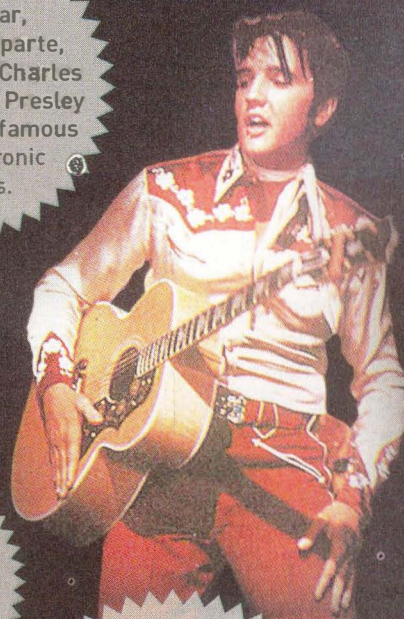
Cleopatra, Julius Caesar, Napoleon Bonaparte, Peter the Great, Charles Darwin and Elvis Presley are some of the famous victims of chronic headaches.

Women are more than twice as likely to suffer from migraine than men.

About 3,000 migraine attacks occur every day per million people.

National Institute of Neurological Disorders has evidence that 10 per cent of all men and 5 per cent of women never experience a headache.

In developed countries, tension headache alone affects two-thirds of adult males and over 80 per cent of females.



Q & a



MEETA LALL

Nutrition expert, New Delhi
Log in to www.the-week.com
and click on ASK EXPERT to
post your queries online.

ASK EXPERT: NUTRITION

Ramanjaneyulu: Please suggest affordable cholesterol-free food.

The first step in lowering blood cholesterol is to forego cholesterol-rich food. You need to eliminate or at least limit food that contain not only cholesterol but saturated fats as well as trans fats.

Avoid cholesterol-rich food such as egg yolk, shellfish, organ meat (liver, kidneys, brain) and foie gras; saturated fat-rich food such as red meat (mutton, beef, pork, veal); desi ghee; butter; whole milk and yogurt/cheese/paneer/ice cream made from it; poultry skin and palm oil. Trans fats-rich food such as vanaspati, margarine, butter substitutes, packaged baked goods, potato chips, fried food are also to be avoided.

Choose fibre-rich food such as whole grain cereals; oats; fruits such as apples, blackberries, pears, oranges, grapefruit, dates, figs, prunes and apricots; green leafy vegetables and other vegetables such as lotus stem and broccoli. Omega-3-rich fatty fish (salmon, halibut, trout, sardines, mackerel and oysters); fish oil supplements; flax seeds as oil (one teaspoon every day) or powder (two tablespoons with water) or as flax oil capsules; walnuts, tofu (soya milk curd) and green leafy vegetables (especially broccoli and cabbage) are also good sources. Monounsaturated fats such as olive oil can substitute the routine cooking oil. Opt for lean

meats such as chicken (skinless), turkey and fish as well as egg whites. Natural food items known to lower cholesterol include soya beans (as flour added to wheat flour, soya chunks or granules or tofu); fenu-greek (as a spice to vegetables or a teaspoonful in powdered form) and amla (powdered or fresh).

A recent study shows that certain food, when eaten in combination, can dramatically reduce cholesterol levels. Combinations of almonds, soya protein, oats and barley can lead to a 20 per cent decline in LDL cholesterol levels, according to this University of Toronto study.

It may also do well for Indians to develop a taste for tofu and oatmeal. At the same time, you need to bring about some lifestyle changes. Achieve and maintain a healthy weight. Increase physical activity to at least 30 minutes on most days. If you smoke, quit. Cut down on sugar and salt intake.

Murthy: I am 35 years old. My skin is oily and I am losing hair. There are deposits on my scalp. Is this dandruff?

When the skin cells on the scalp go into an overdrive, greasy flakes appear especially during warm weather. Your problem is a dry

undernourished scalp which is very easy to cure because of its process of natural cell exfoliation. You need to eat a well-balanced diet with lots of fruits and vegetables and limit intake of sugary and fatty food. Also, maintain a clean scalp. This



will keep the dandruff and hair fall in check. Try an egg-yoghurt pack on your scalp. A mixture of egg yolk and sour yoghurt also nourishes hair strands and maintains the oil balance of the scalp. Apply the mixture on the scalp for half an hour. Then rinse and shampoo. To one tablespoon of lemon juice, add a pinch of black pepper and massage this on your scalp before washing with a mild shampoo. Massage scalp with oil (almond/almond + castor oil/olive oil/coconut oil) at least once a week. Wrap a hot towel around your scalp so the oil gets absorbed into the hair. Apply fenugreek seed paste on your scalp. Wash off after 40 minutes. ●

ASKEXPERT: DIABETES



Dr. Jayaprakash P.

MD (Gen. Med) DM (Endocrinology)
Specialist in Diabetes, Thyroid & Other
Hormonal Diseases.

P. Singh: I am 78 years old. In our family there was not a single person with diabetes. But sadly my 46 year old son was recently diagnosed with diabetes and his random blood sugar was 378mg/dL. Could his diabetes be temporary diabetes as he was under stress at that time?

While diabetes has been shown to be an inherited disease, it is caused by a combination of genetic and environmental factors. One can get diabetes when no-one else in the family has it. Being Indians, we all are genetically susceptible to type 2 diabetes and should get our sugars checked at least once in a year.

There is no such thing as temporary diabetes either you have diabetes or you do not. Yes, any stress can aggravate high blood sugars but in a normal person it is counter balanced by extra production of insulin and this process fails in people with diabetes. Diabetes is diagnosed when Fasting blood glucose levels are over 126 mg/dL or 2-hour postprandial blood sugar measures more than 200mg/dL. If fasting level is between 100 to 125 mg/dL, or postprandial level is between 140 to 199 mg/dL this indicates that one has pre-diabetes.

Do not worry about your son having diabetes as it can be controlled and your son can live a very normal life by taking appropriate medicine as advised by his physician, balanced diet, regular exercise and monitoring.

Kavita S: My 12 year old nephew (my brother in law's son) has diabetes, he is on insulin. My father in law also has diabetes, but he developed diabetes at age of 53. I am now 6 weeks pregnant, what are chances of my baby having diabetes?

Your nephew most probably has Type 1 diabetes and your father in law has type 2

diabetes. Both Type 1 and type 2 diabetes have different causes. Yet two factors are important in both. First, predisposition to the disease is inherited and second, something in the environment triggers it. Genes alone are not enough. Type 2 diabetes has a stronger link to family history than type 1. Lifestyle influences the development of type 2 diabetes very much. It is not possible to predict exactly the chances of your baby having diabetes.

There are plenty of things you can do to prevent type 2 diabetes. To prevent Type 2 diabetes in children, mother should eat healthy foods, get plenty of physical activity and maintain a healthy weight during pregnancy (according to various stages of pregnancy). Continue the same healthy habits in your child from beginning and you can prevent or at least delay Type 2 diabetes.

Harish Kapoor: I am 47 and was diagnosed with diabetes 3 years ago. One of my friends in the United States, who is also a diabetic, has been prescribed an injection for managing his diabetes. He has lost a lot of weight and his diabetes is now well controlled. He claims this is not insulin and that he has to take it only once everyday. Is this medicine available in India?

I think you are talking about GLP-1 analogues, a new class of drug treatment for type 2 Diabetes. This medicine is available in India but what medication is appropriate for you can only be decided by your physician after seeing your complete reports. Also, along with medication you need to do regular exercise and have balanced diet for best effects on your health.

Regarding GLP-1, it is a natural hormone. It is found to be decreased in people with Type 2 diabetes. GLP-1 analogues are known to stimulate insulin release when sugar levels are high in the body (for example - after eating a meal). In addition, GLP-1 also has other beneficial effects in the body that are useful in the management of type 2 diabetes. These include reducing appetite, weight loss, lowering blood pressure and improving beta cell function.

S Kumar: I was diagnosed with diabetes in 2006. Recently my doctor asked me to stop smoking. I know smoking can cause lung cancer, but what effect does smoking have on diabetes? I am smoking since 2000.

It is no secret that smoking is bad for health. Smoking hurts your lungs and your heart. It lowers the amount of oxygen that enters your organs, raises your bad cholesterol and blood pressure. Individuals with diabetes who smoke have a heightened risk of morbidity and premature death associated with the development of macro vascular complications which includes heart disease, stroke and gangrene. Smoking is also related to the premature development of micro vascular complications of diabetes i.e. it increases the chance of hurting your blood vessels kidneys, eyes, nerves and other organs. So, it is always better to quit smoking.

Priscilla Sequeira: I was diagnosed to have diabetes 8 months back at age 39. My mother has diabetes for last 13 years. Last month when we visited our doctor, he advised her to start on insulin because her sugars are not well controlled. I am concerned about taking insulin although my mother says she feels much more energetic after taking it.

We all need insulin, it is a natural hormone produced in our body. Some make it in their bodies and some need to take it from outside. Diabetes means that too much glucose is retained in your blood and it is not getting into the cells. This happens because insulin is missing. Insulin acts as a key which opens the door of cells to help glucose enter inside and produce energy.

Recent research clearly indicates that type 2 is a progressive disease that typically begins nearly a decade before diagnosis. By the time type 2 is diagnosed, most people have already lost half of their insulin making pancreatic beta cells and these further declines over the years. Most people need a various blood glucose-lowering medicines over a time to make the best use of the insulin they continue to make. While some newly developed antidiabetes therapies such as the glucagon-like peptide-1 (GLP-1) have the potential to limit the rate of disease progression, it nevertheless follows that insulin therapy becomes necessity for most patients at some time. While certainly it is helpful to explore what lifestyle changes could improve their diabetes control, it is important to know that diabetes is a progressive disease and appropriate treatment is required to achieve good control of diabetes. So, follow your doctor's advice.

Let's make u

Grooming lessons for the medical fraternity

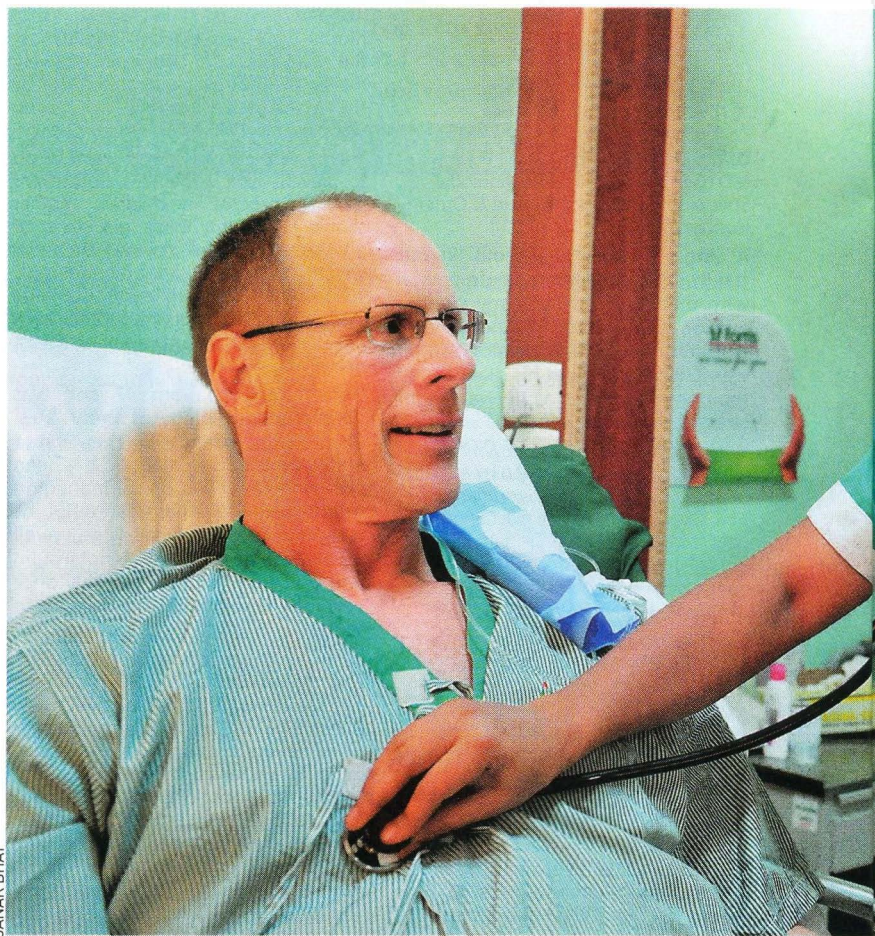
BY MINI P. THOMAS

It has been a caterpillar-to-butterfly kind of transformation for Siji Premlal.

She used little make-up, till she attended the grooming session for nurses at Fortis Hospital, Mumbai. "Inspired by the presentations, I bought a butterfly-shaped make-up kit. I have started using a moisturiser and I tie my hair neatly while on duty," says Siji, 31. The impact of the training has not been merely cosmetic. The lessons in grooming, she feels, have helped her look more professional and have added to her confidence.

Looking good and sounding right have become important in the health care industry. Having realised this, many hospitals are now investing in grooming their staff. Patients are greeted by smiling faces. The well-groomed and polite employees respond to calls quickly, and add an air of vibrancy to the hospital.

Columbia Hospital, Bangalore, has roped in retired Lieutenant Rita Gangwani, image enhancer and personality architect, to train its nurses. "I have taught them how to take care of their hair and facial skin, how to make a professional looking hair bun and do the basic make-up, with a little bit of foundation, moisturiser, lip balm and a neutral colour lipstick. I've also shared with them some grandma's remedies for pimples and facial



JANAK BHAT

WELL GROOMED: Nurse Siji Premlal (right) says the grooming lessons make her look more professional.

hair," says Gangwani, a former official trainer of Ponds Femina Miss India and Miss India Worldwide.

However, moderation is the operative word in the makeover programmes. "I don't try to make them look like models. All I'm aiming at is to make them more presentable," says Gangwani. Male employees are taught to be more presentable, with a neat haircut, well nourished and moisturised skin and shining shoes.

How do patients respond to these changes? "Seeing a cheerful

face itself can be therapeutic," says Soni T., who recently underwent a laparoscopic surgery at Christian Medical College, Vellore. "A patient usually comes to the hospital with a lot of anxieties. Well-groomed and efficient staff can give the patient the message that he will be looked after well," he says.

The finishing courses for doctors, nurses and other workers in the health care industry are tailor-made, depending on the requirements of the hospitals. Workshops on effective communication are

up!



Professional and confident

conducted in hospitals across the country. Bangalore Baptist Hospital holds an ongoing training programme on 'effective communication' in association with the Indian Institute of Management, Ahmedabad, aimed at equipping staff to effectively interact with customers. "An assertive communication at the workplace, making a winning first impression, time management, attitude and behavioural modifications are some of the key focus areas of this training programme," says Dr Alexan-

der Thomas, CEO of Bangalore Baptist Hospital. Some hospitals have included telephone etiquette, too, in the health communication courses. "We ask the staff to smile when they pick up the phone because the person at the other end would be able to hear them smiling," says a trainer with a smile.

Seemingly innocuous things like speaking in the native language can sometimes have a very negative impact on the patient. "There have been instances wherein the patient thought he was about to die as the staff started talking in their native language," says Gangwani, who emphasises the importance of effective communication and body language in her course.

Also imparted are stress management techniques, which include basic exercises that one can do in the duty room or rest room like stretching your legs and rotating your fingers. "We focus on stress management as health care jobs are extremely stressful," says Rama Chhetri, 42, executive senior nurse manager at Pushpanjali Healthcare, Noida. Then there are grooming courses which offer tips on maintaining personal hygiene, like washing one's hands after interacting with patients, to avoid infections.

Many hospitals are now going in for uniforms which are in tune with the times. Patient welfare officers at Fortis wear red uniforms. Dr L. H. Hiranadani Hospital, Mumbai, has taken the cue from the airline industry while designing new uniforms for its nurses. "Our nurses wear pant suits. The new uniforms are aesthetically pleasing and very convenient but not as flashy as those of the air hostesses," says Dr Sujit Chatterjee, CEO.

Grooming is not superficial. Gangwani has included lessons in empathy and compassion, in her 'curriculum' for doctors, nurses and other staff. "It has been designed in such a way that it helps

the staff understand the needs of the patients and offer them better service," she says. "Words like please and thank you can work wonders while communicating with a patient. I also teach health care workers to explain to the patient what exactly they are going to do before each procedure, in simple terms and remember the patients not by their bed numbers but by their names," says Gangwani, who was a nursing officer in the Army.

Amid the gloom even a small gesture from the staff means a lot to the patient. Ambuj Kumar Choudhary, 34, a Delhi chartered accountant, recalls how the staff at the Rajiv Gandhi Cancer Institute and Research Centre, Delhi, made him feel better as his mother Anjana was admitted for multiple myeloma. "I remember that before the stem cell transplant, the nurse on duty at that time offered a small prayer that touched a chord, indicating that someone apart from the family is wishing for the speedy recovery of the patient," he says.

Beyond the benefits to the patient, a good training programme can bring about necessary changes in work practices, especially in the event of a takeover. Such courses also add value to the employee's resume. Career experts say that it holds significance for India, which is the largest provider of nurses after the Philippines.

Retired Lieutenant Binu Sharma, vice-president, nursing services at Columbia Asia Hospital, Bangalore, got an overwhelming response to a grooming session she organised for the hospital staff. "Initially, it was conducted for 10 nurses. But there was a huge increase in the number of participants as days went by," recalls Sharma. "At the end of one week, all the male staff in the hospital, including the junior doctors and the technicians, also joined." ●



INCREDIBLE JOURNEY: David Grier trained for eight months to prepare for his India run

Run a smile

From Kashmir to Kanyakumari, so kids can smile

BY SWAGATA YADAVAR

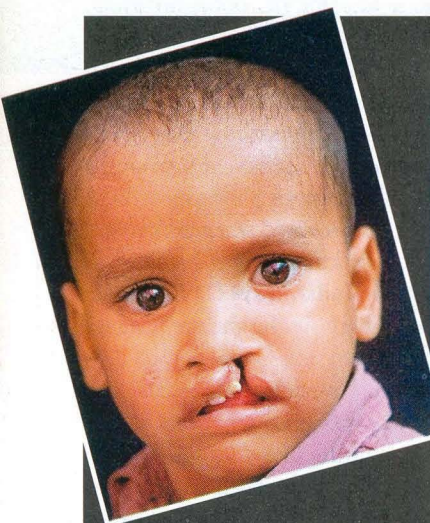
Meeting David Grier is like meeting Mr Hope. The 52-year-old from South Africa dressed in running shorts greets you with a warm handshake and a smile. The extreme athlete, who has run across South Africa, Madagascar and China, was in India to cover the 4,000 kilometres from Kashmir to Kanyakumari. He completed the run in 93 days. But this was not an attempt to get into record books. David was running for his foundation 'Miles for Smiles', which raises funds for Operation Smile that conducts free surgeries for children with cleft lips.

David is a celebrity chef in South Africa, owner of a restaurant rated among the top 100 in the country and has his own television show. However, fitness and running did not feature in his life till much later. "I remember I was weighing 110 kilos. Then I started running and living a healthy life. I realised the healthier I was, the healthier was my mindset; even my vision was better. It was a long journey from being in a bad physical shape to being an ultra athlete, a journey I had to make within myself."

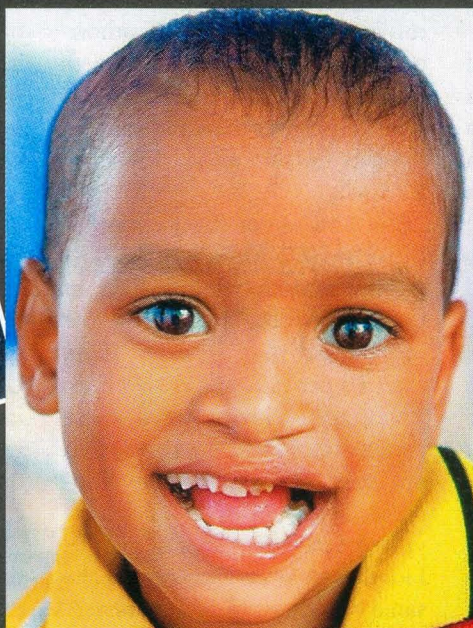
What makes his journey even more incredible is the fact that he is an asthmatic. Along with raising money for cleft lip surgeries, he also wants to give hope to other

asthmatic patients. "I have heard it is treated as a contagious disease here, which it is not," he says. Since his treatment, he is a proponent of inhalers. "I want to show kids, go out, get yourself treated, anything is possible. Asthma is not a curse and with an inhaler, one pump in the morning and evening, you are a new person," says David.

David is one of those who constantly wants to do more. Once he got in shape, he was invited to be a part of Operation Smile. Talking about his cause, he says, "Your face is your window to the world. That's where your character comes from. Give children their God-given right to smile and they are fit for life." David has been true to his vi-

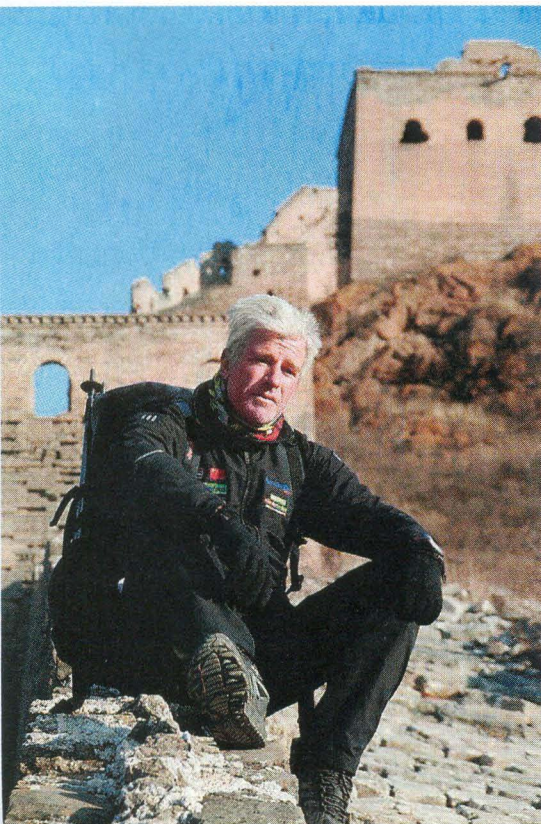


BEFORE & AFTER: Maidul Islam of Guwahati had a successful cleft lip operation conducted by Operation Smile India



Your face is your window to the world. That's where your character comes from. Give children their God-given right to smile and they are fit for life.

David Grier



BROKEN SMILES IN INDIA

One in every 700 children in India is born with a cleft lip. There are about 1 million cases of untreated facial deformities. These children often face difficulties in breathing, eating and speaking. The biggest difficulty, however, is the ridicule due to their deformity. The children suffer ostracism and are sometimes not allowed to attend school. Says Dr Rashmi Taneja of Operation Smile India, "One of the leading causes of cleft lip and palate in India is maternal malnourishment, along with heredity and genetic factors. Also, most patients are poor, and live in the interior parts of the country, and do not know about the treatment or can't afford to get it." Operation Smile treats kids with cleft lip and cleft palate free of cost and provides equipment for their long term self-sufficiency. They have a network of 5,000 medical professionals who donate their time and skills on an annual basis. It takes only 45 minutes and ₹12,500 (the equipment and medication) to repair a child's cleft lip. But a surgery is not the end. Says Ajit Varma of Operation Smile India: "There is post surgical care—dentistry, speech, orthodontics, ENT—and many patients require more than one surgery." The effort is worth it if it can make a child smile.

sion and has already helped 1,000 children around the world smile, raising about 4 million rand for cleft lip surgeries through his journey. He is also spreading awareness about the surgery which takes just 45 minutes and helps turn lives around.

But undertaking a journey of thousands of kilometres is not a cakewalk. David has had to train for eight months to prepare for a journey like this. He worked with sports scientists who helped him reach this optimum level of fitness which allowed him to run around 50 kilometres a day. But more than the physical part, it is the mental part which is the challenge, feels David. "While running, we often face the 'wall' that says 'you can't go any further'. The weird thing is all it takes is another step to knock the wall down. Also, since I am doing the run for these kids, I know I can't give up, I can't let them down," he says.

There is a large team behind David that ensures the journey goes smoothly, a team in South Africa which looks after logistics and fund raising, and a team which travels with him. They make sure his run is safe and that he does not run into trouble with the authorities. There are also two runners whom he calls as PR who run with him, keeping his pace and answering questions of curious drivers on the road.

Ask him about his journey in India and he raves about the hospitality and the simple lives of the village folk. "I think I know more about the villages of India than 80 per cent of city dwellers. There are so many areas where people say 'don't go there, it is not safe'. That's absolute nonsense. Every little village I have visited, I have seen special people. I love to see things happening the same way they did 100 years ago. That's not because the people are

primitive but because people are proud and want to maintain the heritage."

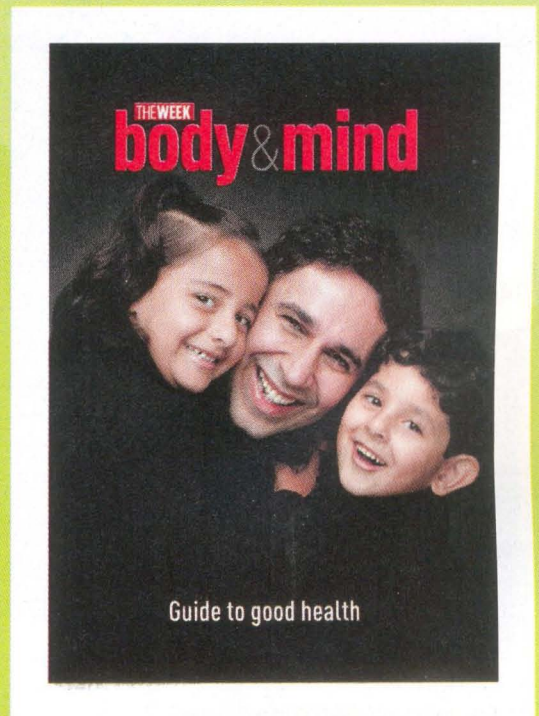
For every journey David has taken, he writes a memoir. He already has a title for his book on India. "Its called *Spices, Tea and Philosophy—My journey across India*. The spices are from the food here, the tea is friendship, everybody here goes, 'chai, chai', and around a cup of tea comes philosophy. That is the deep-rooted spiritualism and philosophical side that I see everywhere in India," says David.

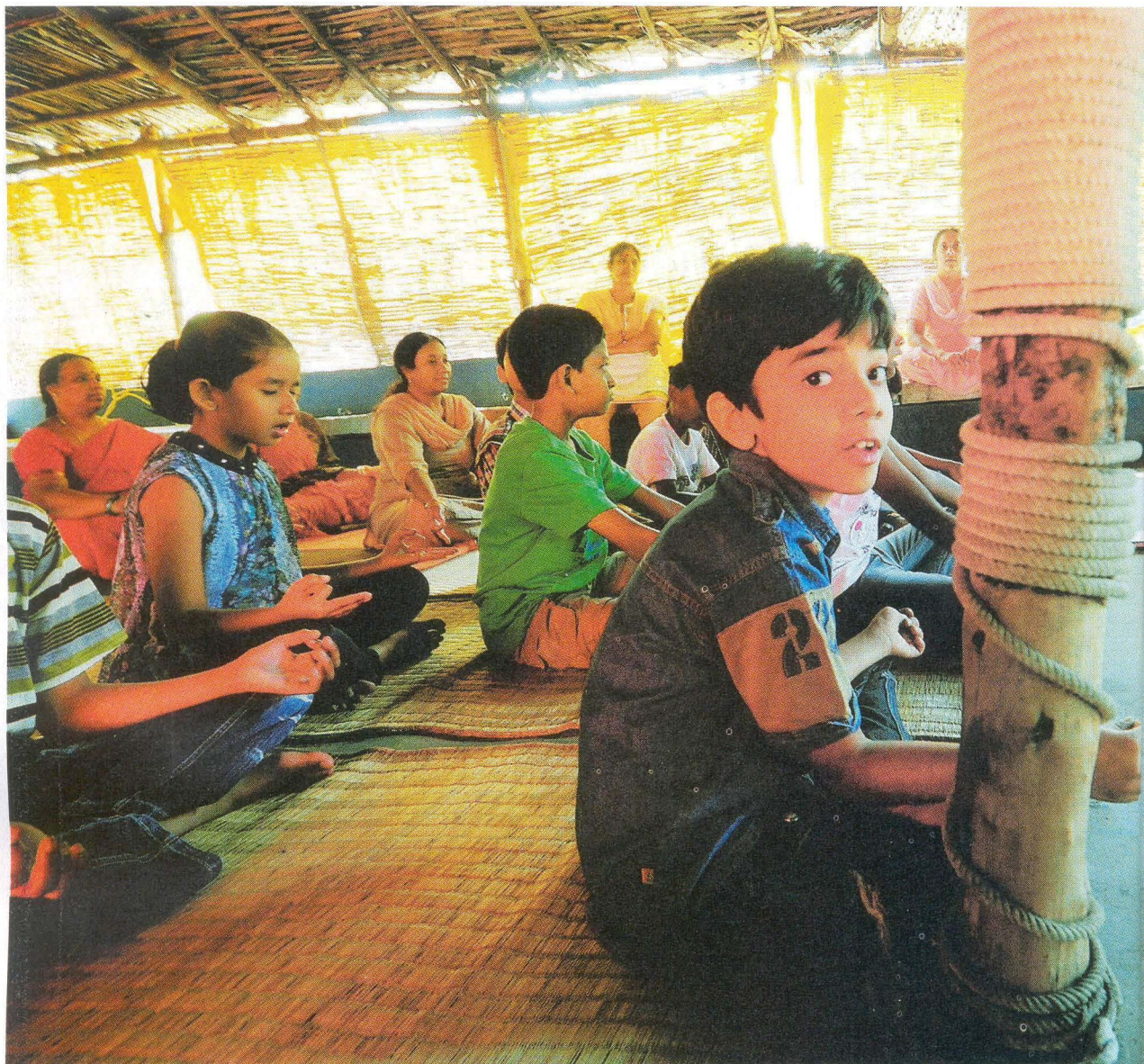
So where is he headed next? "I want to see Cuba before it is spoiled. I want to run across the UK to experience what it is to live in a culture like that. A culture which has influenced others and questions the significance of other cultures!" exclaims David.

For him, there is time to run and time to rest. But he cannot stop, for he has kids all over the world waiting to get their smiles. ●

Bring out the best in friendships

'body & mind', an 80-page booklet on better ways to keep your body and mind healthy, can all be yours for free. All you have to do is fill in the names of 12 friends on the other side of this page, detach it and mail it to us. Hurry and get hold of this booklet that would do a lot to improve your health.





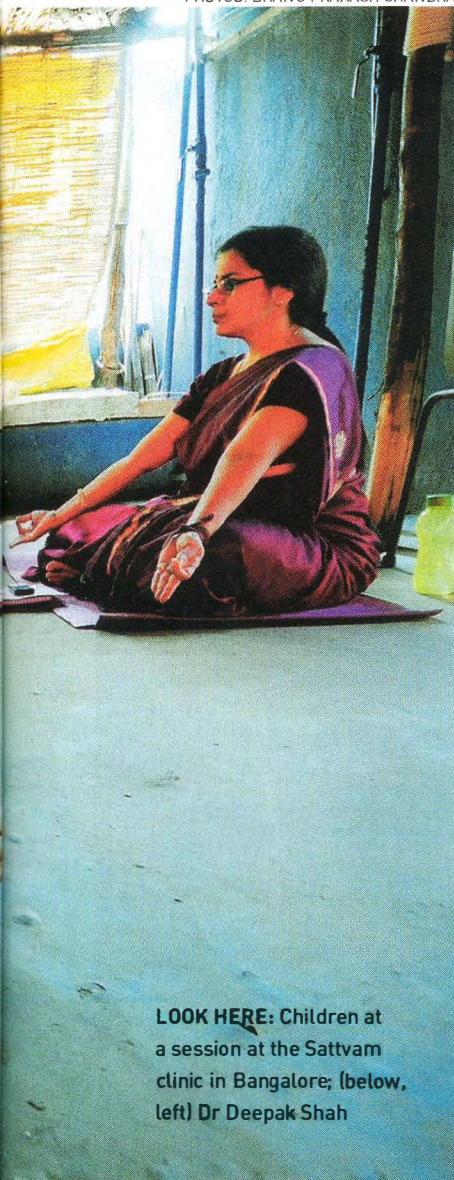
Pay attention

Awareness on attention deficit hyperactivity disorder is low in India but these children need help

BY AARTHI RAGHUNATHAN

On a pleasant Saturday morning, a group of parents and children have gathered on the terrace of the Sattvam Speciality Clinic in Mall-eswaram, a bustling suburb in Bangalore, for a day-long programme of activities that include monkey jumps and breathing like a dog or rabbit. Many of the parents hold senior positions at work, including CEOs, but

PHOTOS: BHANU PRAKASH CHANDRA



LOOK HERE: Children at a session at the Sattvam clinic in Bangalore; (below, left) Dr Deepak Shah

Between 2000 and 2010, the number of diagnosed cases of ADHD increased by almost four per cent each year, making it the number one mental health concern in children.

everyone's game for a bit of the wild—all hoping it brings a positive change in their child.

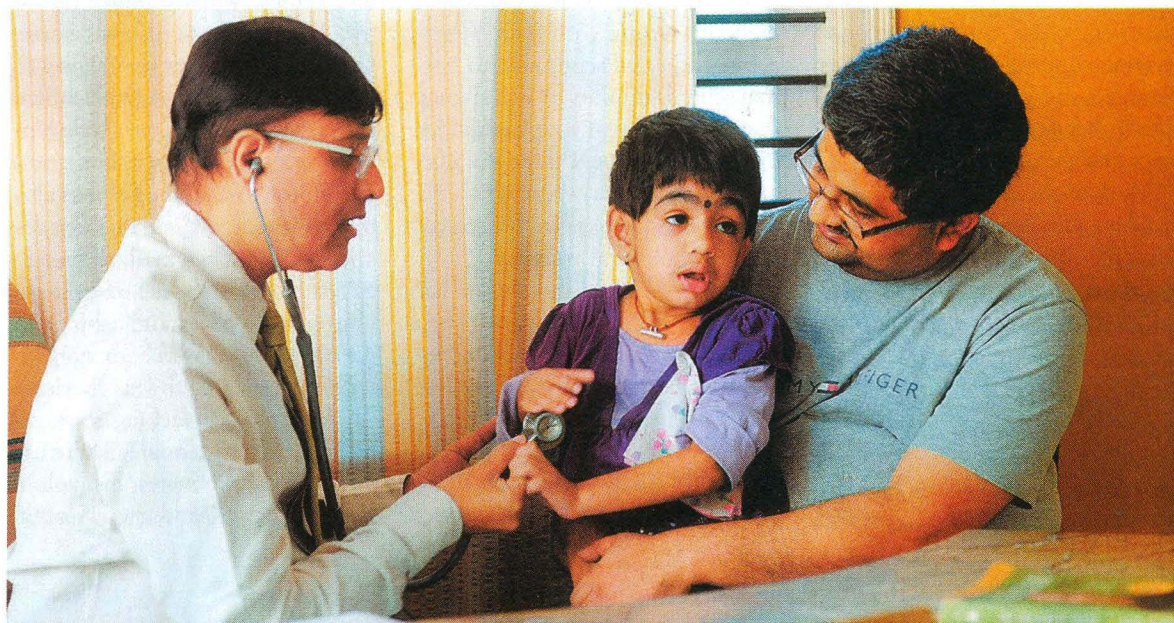
Anmol Prakash, 10, has just sung the hit Tamil song *Why This Kolaveri Di?* without a glitch. His mother, Sangeetha, is crying in joy and relief that Anmol's kolaveri [killer rage in Tamil] was now only a lyric. Perhaps the music therapy he underwent had a calming effect, and he had sung with his legs crossed and eyes closed. Anmol, who was notorious for his temper, was recently diagnosed with Attention Deficit Hyperactivity Disorder (ADHD), a mental disorder that affects one in every 10 children worldwide.

"He was hyperactive since birth," says Sangeetha. "We thought it was normal for a baby boy but it got worse with age. He became very demanding and wanted everything. If we said no, he threw whatever he could lay his hands on. We thought going to school would change him, but he only came back with complaints from teachers for being hyperactive in class, incomplete homework and poor concentration. Soon, I had

become his dreaded villain and he started evading me," says Sangeetha. Over the last few months that she has been visiting Sattvam, the distraught mother, besides seeking help for Anmol's ADHD, has worked hard on changing herself for him.

After a quick celebratory moment together, the mother-son duo moves to a yoga session where they are joined by other families affected by ADHD. Anmol, who is undergoing homoeopathic treatment for the disorder under Dr Deepak Shah at Sattvam, needs to take his medicines four times a day. "The medicines are 65-70 per cent effective in controlling hyperactive or impulsive behaviour caused by ADHD," says Shah. "ADHD is no disease but a disorder. In my experience, there are no problem kids but only problem parents, when it comes to treatment. Affected children need not just medicines but active integration of the doctor, parents and the teacher. Remedial therapies alongside yoga and music complement this approach, provided parents cooperate."

Shah is working on an innovative



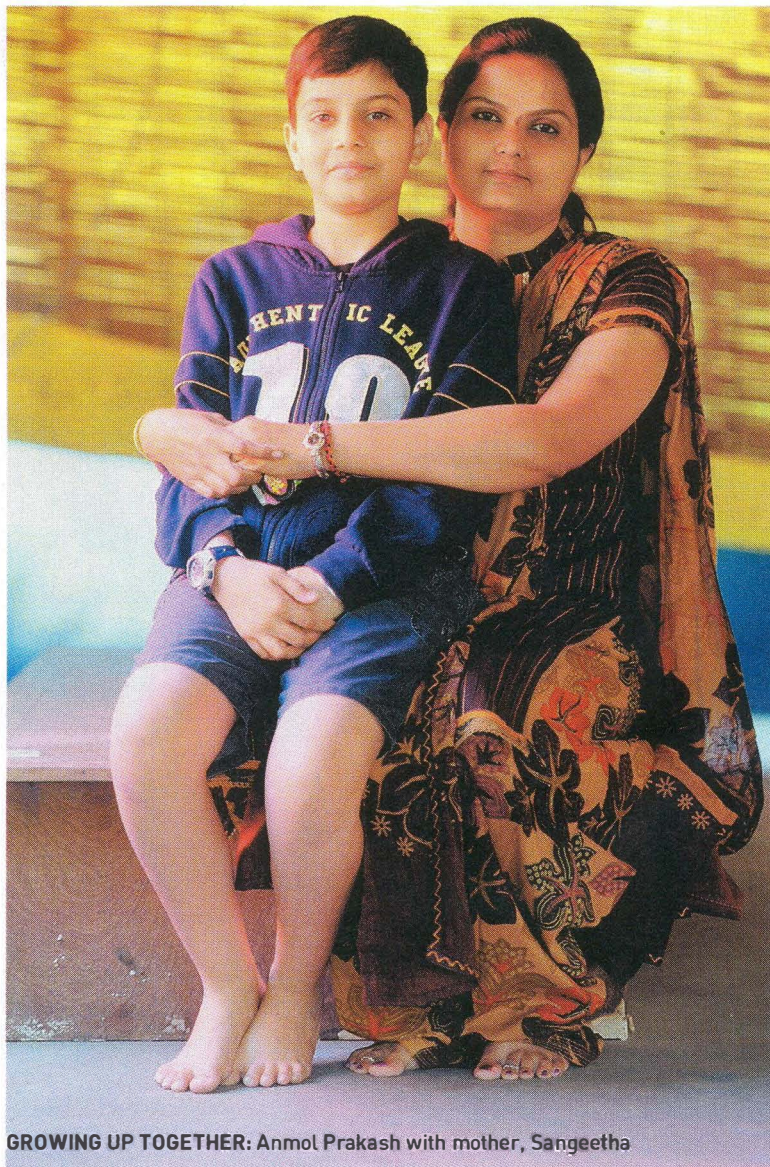
teacher awareness programme—under the aegis of the education ministry—to train teachers in government schools across Karnataka to identify students with ADHD and handle them with better care. The pilot project is supported by the Karnataka State Council for Science & Technology. In case a child is found suffering from an extreme condition of ADHD that is beyond classroom control, professional help will be arranged at an affordable cost.

“It is the teacher who first identifies the problem child based on his behaviour in class and informs the parents,” says Shah. “Doctors come in only at the third level. But, our preliminary survey for the project revealed that 98 per cent of teachers from primary schools, even in Bangalore, had no idea what ADHD was. If not treated, children with ADHD grow up becoming under-performing adults with associated disorders.”

Although there is still no detailed epidemiological study on ADHD in India, the long line of footwear outside the clinic is testimony to the fact that an increasing number of parents are acknowledging that their children have ADHD and are seeking remedial steps. According to doctors, a majority of ADHD cases in India are classified as mild to moderate. There are many cases, however, where children are not given the appropriate treatment as parents and teachers fail to differentiate between normal hyperactivity and the disorder.

“Most of these kids are labelled problem kids and shunted out of school,” says Sharada Jagannath, student counsellor and special educator. “The problem is that parents

Nearly 5.5 million children aged between five and 17 were diagnosed with ADHD in 2009.



GROWING UP TOGETHER: Anmol Prakash with mother, Sangeetha

refuse to believe there's something mentally wrong with their hyperactive child and send them to normal schools thinking it will change them. Unaware of their condition, teachers also resort to complaints and punishments when what the child really needs is timely medical and psychological attention.”

Gayatri V. narrates how her eight-year-old son, who has ADHD, began dreading school because of harassment by a teacher. “He was in class two, but couldn't even identify the alphabet,” says Gayatri. “There was something that troubled him when learning

new things. We also didn't realise the problem until it got worse. One day, his teacher forced him to write and he threw a book at her. Annoyed, she began harassing him every day, sometimes making other children mock him. He was also made to stand outside the class for 15 days.” The boy finally got medical attention when the school sent him home with a note asking the parents to bring him back only after his mental health was checked.

If awareness is lacking in India, help is also inadequate. There are hundreds of web sites and volunteers in the UK and the US offer-

WHAT IS ADHD?

ADHD (attention deficit hyperactivity disorder) is one of the most common mental disorders among children and ranks among the first 10 mental health disorders worldwide. It is not a disease but a neurobiological condition that involves "minimal brain dysfunction".

Hyperactivity, inattention and impulsive behaviour are the common symptoms.

Unfortunately, there are no proper statistics on ADHD in India. Around 20 per cent of ADHD children have learning disabilities and around 80 per cent have academic problems.

COMMON SYMPTOMS

Inattention

- Lack of attention to detail and careless mistakes.
- Trouble planning ahead, staying organised and finishing projects.
- Frequent loss or misplacement of homework, books, toys.

Hyperactivity

- Often leaves his seat in situations where sitting quietly is expected.
- Moves around constantly, often running or climbing inappropriately.
- Talks excessively and has difficulty playing quietly.

Impulsiveness

- Blurts out answers without waiting to be called.
- Has difficulty waiting for his turn.
- Inability to keep emotions in check.

CAUSES

Scientists have not yet identified a single cause for ADHD.

- The primary reason appears to be slow and improper functioning of certain areas of the brain due to chemical imbalance.
- May have a genetic or familial basis, especially from the male side.
- May be related to drugs or toxins the pregnant mother was exposed to.
- Brain injuries due to birth trauma.

ADHD adults

Distractive behaviour

- Difficulty focusing.
- Poor listening skills; hard time following directions.
- Disorganisation and forgetfulness
- Trouble starting and finishing projects.
- Frequently forgetting appointments, commitments and deadlines.
- Constantly losing or misplacing things.

Impulsiveness

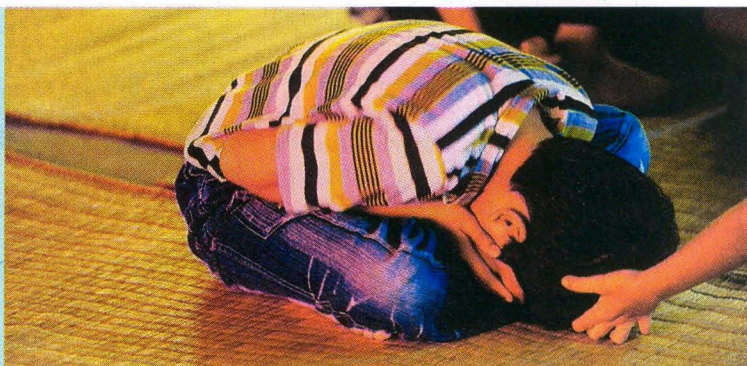
- Blurts out thoughts that are rude or inappropriate without thinking
- Has addictive tendencies

Emotional difficulties

- Hypersensitive to criticism
- Short, often explosive, temper
- Low self-esteem and sense of insecurity

Hyperactivity or restlessness

- Craving for excitement
- Talking excessively
- Doing a million things at once



ing services to help handle such children. In India, there are only a handful, primarily in the metros. "There is an acute shortage of manpower in India to deal with ADHD," says Dr Sunil Mittal, director, Cosmos Institute of Mental health and Behavioral Sciences (CIMBS), Delhi. "What can one do with just 4,000 qualified psychiatrists and a few thousand counselors? An increasing number of parents and even some teachers are now aware of the condition and are more sensitive towards them. But there is still a long way to go with ADHD in India."

So what are the therapies and methods used to treat ADHD? "No doubt, ADHD is a medical condition. But music definitely has a curative effect on affected kids as it aids concentration and has a calming effect," says music therapist Deepa N. Krishnamurthy. "Singing also helps regulate breathing." Yoga improves concentration. "Hyperactivity is an imbalance of energy levels. We can channel it to a large extent through yoga and breathing regulation," says Sheetal Shah, a Bangalore-based yoga therapist. "Normally, it requires at least six-seven sessions to see some change in the child. Over time, it also helps improve their attention in classroom. But to see a sustained development in the child, it is crucial that the parents are also part of the learning process."

It's time for parents to pay more attention. ●

Wet and worried

Loss of bladder control is perplexing. It can be managed, corrected and prevented

BY SUMI MATHEW AND DR KIM MAMMEN

Urinary incontinence, or loss of bladder control, is a frustrating problem for millions of people. Incontinence can impact everything from work to exercise and even the social calendar. Though it affects men and women, it is twice as common in women. Pregnancy, childbirth, menopause and the structure of the female urinary tract account for this difference.

Incontinence occurs because of problems with muscles and nerves that help to hold or release urine. The body stores urine in the bladder, which is a balloon-like organ. The bladder is connected to the urethra, the tube through which urine leaves the body. During urination, muscles in the wall of the bladder contract, forcing urine out of the bladder and into the urethra. At the same time, sphincter muscles surrounding the urethra relax, letting urine pass out of the body. Incontinence occurs when the bladder muscles contract or the sphincter muscles are not strong enough to hold the urine.

Want relief?

The first step is to see a doctor to understand what type of incontinence you have. Your doctor will physically examine you for medical conditions causing incontinence, including treatable blockages from bowel or pelvic growths. In addition, weakness of the pelvic floor leading to incontinence may cause a condition called prolapse, where the vagina or bladder begins to protrude out of the body.

Prevention

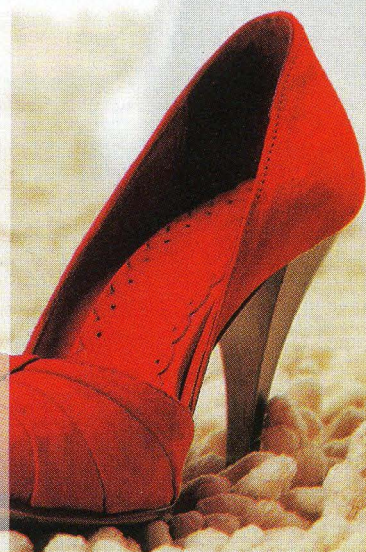
Maintaining a healthy weight and doing Kegel exercises top the list of ways to prevent incontinence. If you smoke, try to quit. Smoking can lead to chronic coughing, which can stress the bladder and trigger leaks.

Medication

For stress incontinence, some antidepressants can limit leaks by tightening muscles at the neck of the bladder. For urge incontinence, doctors prescribe anticholinergic medications. These pills or patches block the nerves that trigger contractions in the bladder muscle. Studies suggest a combination of medication and bladder training is effective.

Surgery

Surgery for stress incontinence is often done as an outpatient procedure. One option is to place the bladder in a sling—a piece of tissue or material that holds the bladder up and prevents leaks. For urge incontinence, surgery can be used to boost the bladder's storage capacity or to implant a device that controls bladder spasms with electrical signals.



Management

Though incontinence is not dangerous, it can take a significant toll on emotional wellbeing. Research suggests that women with incontinence have lower self-esteem, reduced sexuality, and higher levels of depression compared to those with healthy bladders.

Restrict fluids: Women with mild incontinence can stop leaks by drinking less. One litre of fluid a day is sufficient, says research. Avoid fizzy drinks, coffee, tea, and caffeinated sodas. Alcohol in any form is a strict no. Another strategy is to empty your bladder regularly, every two to four hours, even if you don't feel the need.

Food funda: Spicy food, sugar, honey and artificial sweeteners do more than tingle the taste buds; they irritate the bladder. Citrus fruits, apples, bananas and grapes contribute to incontinence.

Medication matters: Blood pressure drugs, water and sleeping pills weaken bladder muscles. Ask your doctor for the side effects of drugs prescribed.

Kegel exercises: Strengthening the pelvic and muscles around the urethra is the best way to manage the condition. You can do this through Kegel exercises: clench the muscles you would use to stop the flow of urine. Hold the squeeze for 10 seconds, then relax. Repeat these three or four times every day.

Collagen injections: Another way to prevent leakage is to inject collagen or other bulking agents into the tissues around the urethra. This boosts the size of the urethra lining and creates resistance against the flow of urine from the bladder. Injections must be repeated every 12 to 18 months and are only helpful against stress incontinence.

Bladder training: It is effective against stress incontinence and urge incontinence. Make a chart of how many times you urinate and when you leak. After observing the patterns, you can avoid accidents by heading to the bathroom before a leak is likely to occur. It's possible to train the bladder to hold out for longer periods.

Types of UI

STRESS INCONTINENCE If coughing, laughing or sneezing cause urine to leak, you may have stress incontinence. Childbirth can injure the scaffolding that supports the bladder. If these structures weaken, the bladder will be pushed forward towards the vagina, preventing the muscles around the urethra from doing its job. The condition can worsen before your menstrual period as lowered oestrogen levels might lead to lower muscular pressure around the urethra, increasing chances of leakage.

URGE INCONTINENCE If you lose urine for no apparent reason after feeling the need or urge to urinate, you may have urge incontinence. A common cause of urge incontinence is inappropriate bladder contractions caused by abnormal nerve signals. Urge incontinence can mean that your bladder empties during sleep, after drinking water or when you touch water or hear it running. Diuretics, hyperthyroidism and diabetes can worsen this.

OVERACTIVE BLADDER It occurs when abnormal nerves send signals to the bladder at the wrong time, causing its muscles to squeeze without warning. Urinating up to seven times a day is normal, but anything more than that with nocturia (waking up at night to urinate) are symptoms of an overactive bladder.

FUNCTIONAL INCONTINENCE People with medical problems that interfere with thinking, moving or communicating may have trouble reaching a toilet. A person with Alzheimer's disease, for example, may not think well enough to plan a timely trip to the washroom. Functional incontinence is the result of these physical and medical conditions.

OVERFLOW INCONTINENCE It happens when the bladder doesn't empty properly, causing it to spill over. Weak bladder muscles or a blocked urethra can cause this. Nerve damage from diabetes or other diseases can lead to weak bladder muscles and tumours and urinary stones can block the urethra.

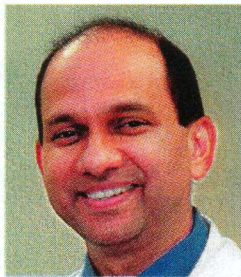
TRANSIENT INCONTINENCE It is a temporary version of incontinence triggered by medication, urinary tract infection, mental impairment and restricted mobility. Severe constipation can cause transient incontinence when the impacted stool pushes against the urinary tract and obstructs outflow.

The authors are at the department of urology at the Christian Medical College and Hospital, Ludhiana.



STETHOSCOPE





DR JAME ABRAHAM, MD, FACP, is Bonnie Wells Wilson Distinguished Professor, chief of oncology and medical director of Mary Babb Randolph Cancer Center, West Virginia University, USA. jameabraham@hotmail.com

Walking on the edges

On a Saturday afternoon in January, I was finishing my rounds at the National Cancer Institute, the largest cancer research hospital in the world situated in the suburb of Washington D.C. From its tenth floor window, I could see snowflakes dancing in the air. Strong winds were carrying them afar. The trees with no leaves were struggling to survive the winter.

Before heading home, I walked back to Dr Jeffrey Freed's room. The brightly lit visitor's room was crowded with people, but heavy silence loomed around. A tacit fog of sadness seeped into the hallways. Even the children were unusually quiet.

It was a cancer ward!

Here lives hang on a thin thread of hope. Here success and failure are measured in days and weeks. Empty beds and shaded rooms represent lost lives and dreams. The stillness of the empty rooms is filled with wounds of lost battles. An immense sense of mortality and inevitability of life and death pervades a cancer ward. Doctors and nurses constantly walk on the edges of life and death.

Dr Jeffrey Freed was in his early forties. He was a leading cardiac surgeon at a neighbouring university hospital. He was in the prime of his life. His research works were published in prestigious medical journals. He was a rising star in cardiac surgery. He was invited to do presentations and plenary sessions at national meetings. Medical students and surgical residents followed him around and took notes of his every word. Patients lined up to see him. Getting an appointment with him was daunting.

Now on the tenth floor of the National Cancer Institute, in a corner room, he was lying with no fanfare. Loneliness was his only companion. I had known Dr Freed only for the past two months since he came to the institute for an experimental therapy.

His door was half closed. I opened the door without making any noise. He was fast asleep. I did not wake him up. His frail emaciated body almost melted into the clean white bed.

When he slept, his eyeballs disappeared deep into their sockets. His cheek bones stuck out on his unshaven face. His lips were dry and cracked.

The Yankees baseball cap on his head partially covered his forehead. The IV poles with bags of medicines stood by him as his guardian angels. Drops of fluid dripped into his vein like soldiers marching with a mission.

The commode next to his bed and the untouched lunch tray on the side table were his only visitors. The ticking sound of the large lonely clock counted the moments with a sense of urgency.

I sat on the edge of a chair. His chest, crammed with tumour, struggled to let air in and out. Tentacles of cancer cells that penetrated deep into every lobe of his liver, and his skin had turned yellow.

His kidneys and heart were slowing down and his ankles were swollen.

His brain, the seat of his charisma and knowledge, was struggling to process simple information. He moved in and out of consciousness. Inch by inch his body was getting ready to bid farewell to this world.

Two weeks earlier, after discussions with Jeffrey and his brother, we decided not to pursue any aggressive treatment.

The doctor, who fought for his patients' lives every waking hour

of his life, was lying on the bed awaiting death.

American poet Miller Williams's poem came to my mind:

"He is amazed how hard it is to die

He lies in the hospital bed, his shallow breaths

audible in the hall. He wonders why-

and tries to laugh because he knows- the deaths

of heroes always seem to be so quick.

Because, he knows, heroes have to fight,

and die fighting; also they rarely get sick.

A nurse looks into the room to say good night.

They don't tell each other what they know,

that both hope these words are the last he'll hear,

but guess they aren't. He thinks of the undertow

all swimmers swimming in strange waters fear,

that grabs you from below. He tries to sink

deep enough beneath the surface of sleep

to be found there and lost. There is a stink


thickening in the room.

He knows the cheap perfume the Death wears.

Why does she stand around?

**Dr Jeffrey Freed
constantly
reminds me of
the false sense of
indestructibility
provided by
my white coat.**





Why doesn't the bitch take him?"

Dr Freed was alone when he took his final breath, imbued with hospital smell. There was no vigil by his patients or fair-weather friends.

His widowed, ailing mother, fighting Alzheimer's disease, was away in a nursing home. He did not want her to see his struggle. His ex-wife was at her winter home in Florida. He had no children. His brother came to do the funeral arrangements.

His large volume of patients made calls for appointments with the next available doctor.

Even after more than 10 years, I have not forgotten Dr Jeffrey Freed. He was the first doctor who died under my care.

Jeffrey constantly reminds me of the false sense of indestructibility provided by my white coat.

None of us can escape the snares of death; that is the certainty of life. When we take that last breath, there will not be any fanfare or cheering; the room will be empty.

But doom and gloom is not in my nature. I cannot live in the past or in the future. Let's seize today. Today is a good day.

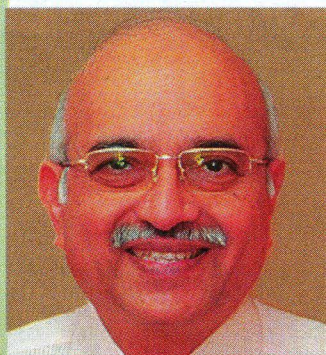
Spring is round the corner. Nature is getting ready to dawn her finest array. Flowers will soon bloom in striking colors. Bushes will thrive on the dead leaves of the past winter. Chirping birds will return from their winter exodus.

The cycle of life will keep rolling.

Let me sort through the trajectory of my life and hold on to what is real and incessant, filtering out the unreal and ephemeral. Often they are intertwined by blurred lines.

It is almost 5 a.m. The coal train across the river is chucking along. My wife and two boys are fast asleep. In an hour, I need to take my son Abel for a tennis match out of town. I am truly a blessed man. Life is indeed beautiful. ●

Q & a



DR D. NARAYANA REDDY
MBBS, PhD, FIC, FACS, ACST
Sexologist, Chennai
dnr@degainstitute.net

ASK EXPERT: SEXOLOGY

G.S: I am 28, unmarried and a virgin. I started masturbating when I was eight. However, I suffer from severe constipation that leads to anal fissure. Is masturbating in any way related to constipation?

Masturbation is in no way related to constipation. Constipation may be due to the intake of certain medicines, lack of adequate fibre in the diet, hormonal disorders (especially hyperparathyroidism), pelvic floor dysfunction (muscles surrounding the rectum are not functioning due to loss of tone) or lifestyle changes like depression and physical abuse.

K: I am 30 and have been married for eight years. Ours was a love marriage and we used to enjoy sex before and after marriage. However, recently, my husband has started avoiding me sexually and doesn't allow me to hold and love him. When we do have sex, he ejaculates very fast and isn't interested in foreplay. When I try to talk to him about the issue, he avoids the topic. In addition, I have an itch in my vagina and it also smells. I tried using cream and powder to get rid of the smell and even visited a gynaecologist, but it hasn't helped. What should I do?

It is difficult to say why your husband is avoiding sex with you. It is

possible he is anxious about his premature ejaculation and hence wants to avoid disappointment for both of you. This might be why he is avoiding foreplay, too. He may be worried that the longer the foreplay the quicker his ejaculation will be. He may also have some infection of the penis and itchiness. This will make him dread intercourse. You both need to be examined by a doctor.

Natesh: I have noticed some skin-coloured and white warts on my scrotum. The warts don't hurt but when the white ones burst, they cause pain and excrete a white fluid. What causes this and how can I treat it?

They may be sebaceous cysts. Sebaceous cysts are small lumps or bumps under the surface of the skin. They are closed sacs containing sebum—a pasty or cheesy-looking material. Although they are commonly found on the face, neck and trunk, they may also appear on the genitalia, as in your case. Blocked sebaceous glands under the skin, swollen hair follicles and excessive production of testosterone are the supposed causes. Usually these cysts are harmless. But when they get infected, they will become painful and cause complications. These can be removed through simple surgical procedures. Consult your doctor in person.

Romy: My boyfriend and I were indulging in foreplay and I gave him a hand job and he climaxed. Some

of the semen fell on his hand and he wiped it and then put his finger inside me. I am worried. Can this get me pregnant?

The chances of you getting pregnant are practically nil. For a pregnancy to occur, healthy and active sperms should be deposited inside the vagina around the time of ovulation of the woman. Since your boyfriend had wiped his hand, the sperms most likely would have been inactivated. If the incident occurred during the non-ovulatory phase of your menstrual cycle, then there is absolutely no chance for a pregnancy.

Meera: I am a 37-year-old married woman. My husband had recently suggested some sex positions, including rear entry, which I had enjoyed. But after intercourse, I feel a burning and itching sensation in my vagina when I urinate. Is this a disease?

There may be additional friction on the anterior (top) wall of the vagina, which is being relayed to the posterior (lower) wall of the urinary passage. Anatomically the vagina and the urethra (urinary passage) are separated by a very thin wall. This condition can be handled by changing the coital posture, drinking plenty of water and citrus fruit juices. It is also possible that you might have contracted an infection of the urethra. The infection has to be treated with appropriate antibiotics. It is best to get it checked by your doctor.



The best aphrodisiac

Look for it in your partner

It never lets you down!' said the advertisement in the magazine. It caught Sunil's attention. He was unable to get erections that easily now. Probably this wonder drug may lift his sagging spirits, he thought.

Man has forever been in search of a wonder drug that will enhance his sexual prowess. These concoctions are known as aphrodisiacs, named after the Greek goddess of love, Aphrodite. The perfect aphrodisiac should induce sexual desire and enhance pleasure and performance. Aphrodisiacs can be a food, a herb, potions or drugs. In India, the belief in herbal aphrodisiacs is legendary and these are believed to be without side effects. Though the term aphrodisiac belongs to the lexicon of mythology and folk medicine, of late, modern medicine has also caught on.

Aphrodisiacs can be classified into activators (disinhibiting love potions or spells), rejuvenators (elixir for youthfulness), and amplifiers (hedonic enhancers). All

the herbal aphrodisiacs sold in the market are rejuvenators.

Modern medicine has come up with certain powerful drugs like sildenafil citrate, tadalafil, apomorphine and selective serotonin reuptake inhibitors (SSRIs).

While these drugs may be effective in one dimension, they have no effect on the other dimensions of sexual problems. Moreover, these drugs have side effects and should be used only under medical supervision.

While man's quest for an aphrodisiac is never-ending, such a drug still eludes us.

Common sense should tell us that the following ingredients will make a great aphrodisiac: a candlelight dinner, a crackling fire, soft music, fragrances, lingerie and sweet nothings whispered in the ear.

Look for an aphrodisiac in your partner and not elsewhere. The best aphrodisiac a man can have is 'a woman who can turn him on and, in turn, get turned on by him'. ●



YogaMadeEasy

By DR S.N. OMKAR
yogaomkar@yahoo.Com

EASY ON THE NERVES

Many important nerve plexuses (networks) are located along the spinal column. In yoga parlance some of these plexuses are called chakras. The seven major chakras are located in a vertical line from the base of the spine to the top of the head. Each chakra is believed to govern bodily functions near its region. This posture, when done with slow and deep breathing, soothes the major nerve plexuses. Hence, it is a very good posture for relaxation.

PHOTOS: BHANU PRAKASH CHANDRA;
MODEL: MANASA UPADHYA

YOU NEED



1. Sit upright on a chair and keep one chair in front.

2. Sit as back as possible on the chair with knees apart and foot rested on the floor.

3. Position a bolster in such a way that it bridges the two chairs.

4. Pull the pillow close to the pelvis.

5. Hold the chair in front.

6. Stretch the chest and navel up.

7. Retaining the stretch, exhale and slowly bend on to the pillow.

8. Rest the torso on the pillow.

9. Stretch the arms on the chair and relax.

10. Keep a blanket or two on the pillow to get the height right.

11. Rest the neck sideways and relax.

12. Stay for about 2-3 minutes with slow and deep breathing.

13. Press the palms on the pillow and slowly get up

